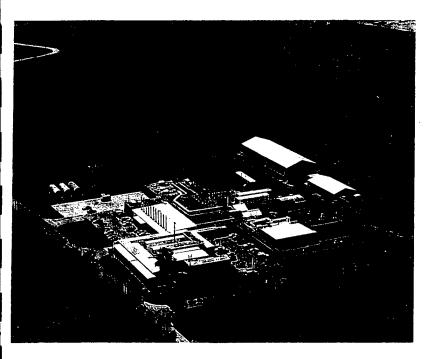
# REPORT

FINAL REPORT



Task 92-31: Establishment of the

**Porcine Isolated Perfused Skin** 

Flap Model as a Decision Tree

**Network Screening Module for** 

**Assessing the Efficacy of Systemic** 

**Antivesicant Pretreatment and** 

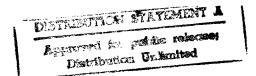
**Treatment Compounds** 

To

U.S. Army Medical Research

and Development Command

May, 1997





# REPORT DOCUMENTATION PAGE

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#### FINAL REPORT

# Contract DAMD17-89-C-9050 A Medical Research and Evaluation Facility (MREF) and Studies Supporting the Medical Chemical Defense Program

on

#### **TASK 92-31:**

ESTABLISHMENT OF THE PORCINE ISOLATED PERFUSED SKIN FLAP MODEL AS A DECISION TREE NETWORK SCREENING MODULE FOR ASSESSING THE EFFICACY OF SYSTEMIC ANTIVESICANT PRETREATMENT AND TREATMENT COMPOUNDS

to

# U.S. ARMY MEDICAL RESEARCH AND MATERIEL COMMAND

May, 1997

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In conducting the research described in this report the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals" prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Animal Resources, National Research Council (U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health (NIH), Publication No. 86-23, revised 1985).

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# **Executive Summary**

The isolated, perfused porcine skin flap (IPPSF, or "flap") model was developed at the Cutaneous Pharmacology and Toxicology Center, College of Veterinary Medicine, North Carolina State University (NCSU-CPTC). The model involves surgical resection of an area of inguinal skin, and the apposition and suturing of skin margins to form a single-pedicle, tubular flap that is left attached to the pig. Two days later the flap is harvested by arterial cannulation and separation from the pig and perfused for up to 9 hr in an environmentally controlled chamber. Personnel at NCSU-CPTC designed the IPPSF model for studying the transdermal kinetics of topically applied xenobiotics. They have also used the model to study the dermatotoxicity of sulfur mustard (HD) at exempt chemical surety level concentrations (less than 10 mg/mL). The objective of Task 92-31 was to transfer the IPPSF technology to Battelle for use in examining the dermatotoxicity of HD at surety levels and for establishing a test paradigm for screening candidate prophylactic and therapeutic countermeasures.

An animal room at Battelle's Medical Research and Evaluation Facility (MREF) was remodeled as a surgery unit, and MREF personnel traveled to NCSU-CPTC to receive training on flap surgery, harvesting, and perfusion. Once procedures were established at the MREF, a perfusion technician from NCSU-CPTC visited Battelle and made several suggestions for improving the perfusion techniques. Based on the appearance of the flaps and examination of a set of physiologic data from previous healthy flaps, the technician indicated that the technology transfer appeared successful.

In a subsequent set of experiments, the metabolism of most flaps, including naive (untreated) and ethanol controls as well as those treated with HD in ethanol, exhibited a slow decline beginning approximately 2 hr after perfusion was started. The anticipated effects from treatment with HD in ethanol, i.e., increased vascular resistance, decreased metabolism, grossly observable blisters, and histologic evidence of increased incidence of epidermal-dermal separation and dark basal cells, were not observed. Consultation with NCSU-CPTC staff and inspection of Battelle standard operating procedures and methods suggested several modifications in technique, including prolonged flushing of flaps to assure removal of red blood cells (RBCs) prior to

perfusion. Subsequent flap preparation also failed to respond to HD as expected. Flaps perfused with a media made with bovine serum albumin (BSA) from a different source exhibited increased vascular resistance during the middle and end of perfusion sessions, increased incidence of epidermal-dermal separation, dark basal cells, and frank blisters, but these changes were independent of topical flap treatment.

MREF personnel were not able to consistently duplicate the dermatotoxic effects of HD applied on IPPSFs as reported by NCSU-CPTC. Results indicated that the flap appeared to be highly sensitive to individual animal variations in vascular anatomy, the extent of RBCs retained after extensive flushing, and media composition and pH. The inherent variability of the model, coupled with its relatively weak response to HD, indicated that it would be unsuitable for assessing the efficacy of candidate prophylactic and therapeutic countermeasures against topically applied HD. The IPPSF should be an excellent model, however, for estimating skin penetration by xenobiotics.

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#### **TASK 92-31:**

# ESTABLISHMENT OF THE PORCINE ISOLATED PERFUSED SKIN FLAP MODEL AS A DECISION TREE NETWORK SCREENING MODULE FOR ASSESSING THE EFFICACY OF SYSTEMIC ANTIVESICANT PRETREATMENT AND TREATMENT COMPOUNDS

#### 1.0 Introduction

Personnel from the U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) considered using the isolated, perfused porcine skin flap (IPPSF) model for studying the dermatotoxicity of sulfur mustard (HD). The IPPSF model was developed at the Cutaneous Pharmacology and Toxicology Center in the College of Veterinary Medicine at North Carolina State University (NCSU-CPTC).<sup>1,2</sup> The IPPSF, or simply "flap", is produced by incising an elliptical area of ventral abdominal skin on a female weanling pig and suturing together the lateral and ventral edges to form a single-pedicle, tubular flap with circulation intact. The tissue is allowed to heal for two days, and then excised and placed into an environmentally controlled perfusion chamber. Physiological parameters, including glucose utilization, lactate production, and vascular resistance may be monitored. This technique provides a skin model with normal anatomical structure and microcirculation. Researchers at NCSU-CPTC have shown that this model produces microvesication upon exposure to hemisulfur mustard<sup>3</sup> or sulfur mustard (HD)<sup>4, 5, 6, 7, 8, 9</sup>

The objectives of this work were to transfer this technology to Battelle's Medical Research and Evaluation Facility (MREF) and to develop it for evaluating systemic prophylactic and therapeutic treatments (SP&TTs) against topical exposure to HD.

These objectives were to be accomplished over the course of four phases:

Phase I (Technology Transfer)

- attend training sessions at NCSU-CPTC and learn the surgical and perfusion techniques,
- Purchase equipment and modify a room in the MREF for this non-invasive surgery,

- Write standard operating procedures (SOPs) and methods based on documents from NCSU-CPTC, and
- Practice producing and perfusing flaps.

Phase II (Validation)

- Produce and perfuse a statistically relevant number of naive (i.e., no insult applied) flaps, and
- Compare the physiologic data with controls from NCSU-CPTC.

Phase III (Decision Tree Network Module Development)

• Develop an experimental procedure that could be used to effectively discriminate among candidate SP&TTs their ability to protect against HD-induced injury.

Phase IV (Test Material Evaluation)

Evaluate and rank order up to seven SP&TTs.

#### 2.0 Materials and Methods

Materials and methods employed in this study are described in MREF Protocol 97, entitled "Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds" (Appendix A of this report).

# 2.1 Chemical Surety Materiel

approximately 91.5 percent. Dilutions of HD, made in anhydrous ethanol at target concentrations of approximately 10 and 50 mg/mL, were analyzed by MREF chemists prior to use on study. At the completion of each flap dosing session, a sample of HD diluted in ethanol was dispensed from the dosing device into a 10-mL volumetric flask, and the flask filled to the quantity sufficient line with ethanol. After the volumetric flask was capped and the contents mixed by inverting the flask

several times, samples were aliquoted into glass vials for analysis by gas chromatography. The analyses, expressed as a percent of the expected concentrations, are presented as a dose control chart with 95 percent upper and lower limits in Figure 1 (Appendix B). The mean of all HD dose samples was 95 percent of expected concentrations.

Methods for the surgical production and harvesting of the IPPSF, and for set up, preparation, maintenance and cleaning of the IPPSF perfusion chamber, are described in MREF SOPs and methods listed in Table 1 (Appendix C). These were written based on documents obtained from NCSU-CPTC and the training received there. Typically, two flaps were raised and harvested from each pig. Each flap was cannulated and placed in an environmentally-controlled perfusion chamber within a fume hood.

#### 2.2 Test Animals

Female, weanling specific pathogen free (SPF)Yorkshire swine (18 to 32 kg) were obtained from two local suppliers. The first 27 swine used in the task were obtained from Shady Side Farms (Powell, OH). The remainder, 43 swine, were obtained from Isler Genetics (Prospect, OH). The herds of both suppliers were certified by the National SPF Swine Accrediting Agency (Conrad, IA) to be free of pneumonic lesions, brucellosis, swine dysentery, turbinate atrophy, pseudorabies, lice, and mange. The changing of supplier was to determine whether the source of the weanling swine and the inherent differences, including genetics and environmental factors such as time spent out-of-doors, had a significant impact on flap physiology.

Housing at the MREF consisted of raised nursery decks (Palco, Belle Plaine, IA). Each shipment of swine was held in isolation and observed for clinical illness for at least 7 days prior to study initiation. Each pig was given either Purina or another veterinarian-approved swine feed at a daily rate of 2 to 3 percent of its body weight. Tap water was provided *ad libitum* in the holding pens. Each pig was anesthetized and taken to a surgery suite for IPPSF production, and two days later for IPPSF harvesting. Heart rate, respiratory rate, and body temperature were monitored during these procedures. After each surgery following recovery from anesthesia, the pig was returned to its cage.

# 2.3 IPPSF Production

Each pig was transported into the surgical preparation area and premedicated intramuscularly (i.m.) with atropine sulfate (1.5 mg/kg) followed by an i.m. injection of xylazine (4.4 mg/kg) and telazol (2.2 mg/kg). The pig was intubated, and anesthesia was maintained with halothane. An intravenous catheter was installed in a marginal ear vein to provide lactated Ringer's solution at approximately 120 mL/hr. The pig was prepared for aseptic surgery in the caudal abdominal and inguinal regions using Betadine, isopropanol, and sterile water. Flaps were raised bilaterally and simultaneously. For each flap, a sterile marking pen was used to place reference marks on the skin in the caudolateral flank region. Skin incisions were made around the caudal superficial epigastric artery within an approximately 4- by 12-cm rectangle. Lartger superficial vessels were ligated and cut, and minor vessels were cauterized. Subcutaneous tissue was dissected away from the skin. Dissection continued until the only tissue connecting the flap to the donor was the caudal superficial epigastric artery, paired venae comitantes, and immediate connective tissue. Starting at the caudal end, the lateral and ventral sides of the flap were apposed and sutured together. Fat was trimmed away from the flap edges, if necessary. In the remaining wound, three tissue layers were separately apposed and sutured together in sequence: deep subcutaneous tissues, superficial subcutaneous tissues, and skin incision edges. A skin sample was collected from the left wound site lateral to the flap and placed into 10 percent neutral buffered formalin solution (NBFS). This skin sample was processed for examination by light microscopy and served as a general histology control for that animal. The flap was sutured to the cranial end of the wound to immobilize it and the wound site and flap were bandaged. The pig was allowed to recover from anesthesia and returned to its pen.

# 2.4 IPPSF Harvesting

Two days after flap production, the pig was anesthetized as before (but without atropine and without installation of an intravenous catheter). A 3-mL volume of 1,000 U.S.P. units/mL of heparin was administered in a marginal ear vein. Care was taken during site cleaning to ensure

that scrub solution did not contact the flaps. The left flap was harvested, followed by the right flap. Sutures were removed from the base of a flap, and the flap lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery was cannulated with polyethylene tubing (I.D. 0.58 mm, O.D. 0.97 mm). Other connecting tissues were severed, and the flap perfused with heparinized normal saline warmed to approximately 37 C. The wound was intentionally not closed because previous experience had shown that not closing improved overall healing and decreased the incidence of abscess formation. The pig was allowed to recover from anesthesia and returned to its pen.

# 2.5 Perfusion Chamber Features

An acrylic chamber (USA/Scientific Plastics, Ocala, FL) similar to, but shorter than, the model used at NCSU-CPTC was designed. The MREF model was approximately 53 cm wide, 33 cm deep, and 29 cm tall as illustrated with equipment in Figure 2 (Appendix B). Internal parts could be accessed by any of three routes:

- To allow chamber cleaning, the entire front panel could be removed by loosening three thumbs screws at the top and sliding out the removable hinge pins at the bottom;
- The front panel included a sliding door that allowed manual adjustments without causing significant changes in chamber temperature and humidity;
- The top of the chamber included a removable access panel for dosing the flap.

The perfusion chamber was elevated for in-hood use on 10-cm tall legs to allow air flow. Environmental conditions were controlled at approximately 37 C and 40 percent relative humidity with a custom-built temperature/humidity control unit (Al Love & Associates, Raleigh, NC). Heated, humidified air entered the chamber through a hose at the lower front corner of the right-side panel, exited through a hole in the upper left corner of the back panel, and was cycled back to the control unit via a return hose. Temperature and relative humidity were monitored with a

probe mounted on the back panel and wired to a model HI 8564 Thermo-Hygrometer (Hanna Instruments, Woonsocket, RI).

# 2.6 Nutrient Media Flow in the Perfusion Chamber

The flow of nutrient perfusion media (Table 2) to the flap was powered by a peristaltic pump (Manostat, New York, NY). Two acrylic reservoirs in the chamber and all tubing and connectors were filled with perfusion media. The venous reservoir, on the left, was periodically filled from outside the chamber through a piece of Tygon® tubing, 0.397-cm OD, 0.238-cm ID. Tygon tubing connected the venous reservoir to an approximately 150-cm length of 0.24-cm OD, 0.16-cm ID silicon tubing housed in an oxygenation chamber. Thin-walled silicon tubing was used by NCSU-CPTC scientists to allow penetration of oxygen and carbon dioxide which were supplied to the media at approximately two bubbles per second from a tank containing 95 percent oxygen and 5 percent carbon dioxide.

Tygon tubing connected the efferent side of the oxygenation chamber to an arterial reservoir. The arterial reservoir was mounted over a stirring plate and contained a stir bar and a pH/thermistor probe wired to an Accumet model 955 portable pH/mV temperature meter (Fisher Scientific Co., Pittsburgh, PA) mounted on the chamber. Seals around the ports prevented air from entering the arterial reservoir since the pump produced a negative pressure in the reservoir.

Tygon tubing carried the media from the arterial reservoir through the right chamber panel past a media sampling port to the pump. A section of silicon tubing (0.24 cm ID, 0.40 cm OD) was used in the pump. Tygon tubing carried the media back through the right chamber panel to three probes in series:

- An in-line flow probe that was wired to a base unit (Transonic Systems Inc., Ithaca, NY),
- A pressure transducer wired to a Propaq model 106EL patient monitor unit,
   (Protocol Systems, Inc., Beaverton, OR), and
- A thermistor housed in a Teflon coupler and wired to the Propaq unit.

A final section of Tygon tubing carried the media to a three-way stopcock with Luer fittings. The flap cradle on a support stand was placed under the top access panel near the stopcock. When the flap was mounted in the cradle, the stopcock was fitted into the needle attached to the cannulation tubing. Media entered the flap though the superficial epigastric artery which normally perfused all but the extreme tip of the flap tissue, and exited the flap via venules draining from the proximal end of the flap. The used media collected in a rectangular pool machined into the lower end of the cradle near the proximal end of the flap. At approximately 1-min intervals, the accumulated used media drained through a port in the bottom of the pool. A section of Tygon tubing carried the media through the left chamber panel, past a stopcock, and into a receptacle waste bottle.

# 2.7 Calibrations and Perfusion Chamber Preparations

Periodically between experiments, the Propaq pressure instrument was calibrated against a column of water. Before each experiment, the pH meter was calibrated with pH 4.00 and pH 10.00 standards. The arterial reservoir cap, with the pH probe seated through it, was attached to the reservoir to form a sealed vessel. Quick disconnect fittings (Colder Products Co., St. Paul, MN) on the ends of tubing sections, and at reservoirs and the oxygenation chamber allowed for tubing disconnection without loss of media. All sections of tubing were connected in series independent of the reservoirs, and filled by aspirating media from a filling beaker with a 30-cc syringe. The tubing sections then were connected to the reservoirs and the oxygenation chamber. The pressure and flow meters were zeroed. A section of Tygon tubing was temporarily attached to the distal stopcock, and the free end was placed into a 10-mL graduated cylinder. The pump was powered on, and the flow meter was checked with volume per unit time. The pump was adjusted to deliver, and the flow meter was calibrated to read, 1.0 mL/min. After calibration, the pump was powered off, and the free end of the tubing was attached to the venous reservoir, thus completing a media circuit. The pump was powered on, and media circulated through the system until the flap arrived from surgery, typically approximately 10 min later.

The height of the flap cradle stand was adjusted so there was no change in elevation from the pressure transducer to the point of media entry into the flap. Thus, the pressure at the transducer and flap was the same. Due to the peristaltic action of the pump, the pressure in the system oscillated with a period of approximately 0.8 sec with normally approximately 10 mm Hg between the extremes. The Transonic base unit displayed both the real-time pressure and the integrated mean pressure calculated every 5 sec.

Media assays for glucose and lactate concentration were performed simultaneously in a model 2700 SELECT Biochemistry Analyzer (Yellow Springs Inc., Yellow Springs, OH) with dual ion selective membranes. The instrument was maintained and calibrated with standard solutions daily.

The media in the arterial reservoir was maintained at a target pH of 7.35 by periodic adjustments with 1 N hydrochloric acid or 1 N sodium hydroxide solutions injected with a syringe through a stopcock and a section of Tygon tubing connected to the arterial reservoir.

Adjustments were usually made when the media pH exceeded 7.4, as the constant stirring of media in the arterial reservoir persumably caused a degassing of carbon dioxide, thus increasing the pH.

# 2.8 Preparation of the IPPSF for Perfusion

After a flap was cannulated and excised from a pig, it was flushed with heparinized normal saline, weighed, flushed again, and placed on a cradle in a perfusion chamber. The pump was powered off, and the temporary tubing between the stopcock and venous reservoir was removed. The cannulation needle hub was attached to the stopcock, and the pump was powered on. The flap was given an acclimation period of nominally 1 hr. If the pressure meter indicated a pressure greater than 50 mm Hg, the flap was adjusted to minimize any internal constriction of the cannulated artery. Usually a slight pulling of the flap away from the tubing put slight tension on the interior vessels and straightened any crimps. The pressure usually decreased as the flap warmed to chamber temperature. If the baseline pressure was greater than 50 mm Hg at the end

of the 1-hr acclimation period, the flap was not used. This was the same criterion for flap rejection used by personnel at NCSU-CPTC.

A dosing template was constructed of two layers of Stomahesive® (ConvaTec, Princeton, NJ) cut in rectangles with 6-cm x 2.5-cm outside edges, 5-cm x 1.5-cm inside edges, and a 0.5-cm wide perimeter. The template was adhered to the dorsal surface of the flap with Skin-Bond® (Smith & Nephew, United, Inc., Largo, FL). Initially, the template was adhered to the flap just before placing it in the chamber, but this step was later delayed until 1 hr after perfusion was started, or immediately before dosing.

#### 2.9 Administration of Dose

Flaps either were not treated or received a 300-µL dose of either ethanol or HD (approximately 10 or 50 mg/mL) in ethanol. The amount of HD thus administered was either 3 or 15 mg. The dose was administered, from a glass syringe fitted with a blunt-tipped needle, along the axis of the flap from one end of the dosing template to the other.

# 2.10 Physiologic Parameters Monitored and Recorded

Several times were recorded, i.e., flap harvest time, perfusion start time, and dose application time. Physiologic parameters were recorded at either the first or second quarter-hour after perfusion was started, in 15-min intervals for the next hour, and in 30-min intervals for the next 8 hr. The total perfusion period was approximately 9 hr. At each recording the following procedures were followed.

- 1. At 1 min before the observation time, the stopcock next to the media waste receptacle was turned to stop the flow of used media from the flap.
- 2. An approximately 1-mL sample of media was collected from the sampling port between the arterial reservoir and the pump.

- 3. The following parameters were recorded:
  - a. Observation time,
  - b. Chamber air temperature and relative humidity,
  - c. Aterial reservoir media pH,
  - d. System pressure extremes over a 5-sec interval, and the integrated mean displayed on the Propaq unit,
  - e. Media temperature at the in-line thermistor between the flap and the pressure transducer, displayed by the Propaq unit, and
  - f. Media flow, displayed by the flow base unit.
- 4. A 1-mL syringe was inserted into the stopcock next to the media waste receptacle, the stopcock was turned, an approximately 1-mL sample of used media was collected, and the stopcock turned back to its original, free-flow position,
- 5. The media samples were dispensed into labeled serum vials and stored for 30 min on a weigh boat in the hood. This period ensured hydrolysis of any HD that might have penetrated the skin or leaked through the dosing template seal and into the used media,
- 6. Media samples were removed from the hood at approximately 30 min after collection and analyzed for glucose and lactate concentration simultaneously. Results were printed on thermal paper and recorded in a spreadsheet with other physiologic data.

Environmental parameters (chamber temperature and humidity, and media pH and temperature) were monitored throughout each experiment to ensure optimal conditions for maintaining a healthy flap.

# 2.11 Study Termination and Tissue Collection

The pump was powered off at approximately 9 hr after the first observation time, and the volume of media in the waste receptacle measured in a graduated cylinder. If dosed with HD, the flap was decontaminated with 0.5 percent sodium hydroxide solution and then rinsed with distilled water dispensed from squeeze bottles. The cannulation needle hub was detached from the stopcock, the dosing template removed, and the flap weighed in a tared container. The flap was transected in the middle, and an approximately 2-mm thick section was cut from the middle of each half. The resulting flap disc was trimmed of underlying tissue and non-treatment area to leave only a section of skin that had been within the dosing template. The samples were placed into labeled vials containing 10 percent NBFS. Flap samples and skin samples collected during production of the flaps were paraffin embedded, sectioned at approximately 5  $\mu$ m, mounted on glass slides, and stained with hematoxylin and eosin. The slides were shipped to Dr. Nancy Monteiro-Riviere at NCSU-CPTC for histopathologic examination. Dr. Monteiro-Riviere's reports identified some procedural shortfalls, such as insufficient flushing immediately after flap cannulation and excision as evidenced by red blood cells (RBCs) in sections.

# 2.12 Statistical Analyses

Data were recorded in a notebook spreadsheet program (Quattro Pro 6.0, Novell, Inc). Experiment information (dates, surgeons, flap treatment, etc.) was recorded in a separate spreadsheet and merged with the physiologic parameters data using the Statistical Analysis System (SAS Institute, Cary, NC).

#### 2.12.1 Computations

Flow rates recorded at each observation period were corrected with the following factor determined for each flap:

$$\frac{V_w + 21mL}{V_{wait} + 540mL}$$

#### where

- V<sub>w</sub> was the volume in the waste receptacle,
- 21 mL was the volume of the used media samples removed for glucose and lactate concentration assays,
- $V_{wait}$  was the volume of media perfused into the flap during the period between initiation of perfusion and the first quarter-hour on the clock, and
- 540 mL was the volume expected to be perfused at 1 mL/min for 9 hr.

Vascular resistance, VR (mm Hg•min/mL), was calculated at each observation time as the ratio of in-line mean pressure to the corrected flow. Baseline-normalized VR at a given time after dosing (no units) was calculated as VR at that time divided by VR immediately before dosing commenced.

Glucose utilization (GU, mg glucose/hr/g flap tissue), a general index of flap health normalized to the mass of the flap, was calculated as

$$GU = \frac{(G_a - G_u)F(60 \text{min/}hr)(1000 \text{mg/}g)}{W_f(1000 \text{mL/}L)}$$

#### where

- G<sub>a</sub> and G<sub>u</sub> were glucose concentrations (g/L) in the arterial media sample and the used media sample, respectively,
- F was the corrected mean media flow rate (mL/min), and
- W<sub>fi</sub> was the initial (i.e., before perfusion) weight (g) of the flap.

The units of lactate produced per unit glucose consumed (no units) was an estimate of the anaerobic metabolism in the flap and was calculated as

$$M_{An} = \frac{L_u - L_a}{G_a - G_u}$$

where L and G were lactate and glucose concentrations (g/L), respectively, and the subscripts represented arterial and used media, respectively. The proximity of this variable to unity was used to evaluate flap health during the experiment.

Cumulative glucose utilization (CGU, mg glucose/g flap tissue), an index of the overall health of the flap at the end of an experiment, was the integral of GU over time using the trapezoidal rule:

$$CGU = \sum_{i=1}^{n} GU_{i}(t_{i} - t_{i-1})$$

where

•  $GU_i$  was the glucose utilization over intervals i from 1 to n (typically n = 21), and  $t_{i-1}$  and  $t_i$  were the interval beginning and end, respectively (hr).

#### 2.12.2 Plots

Three flap data sets were compiled and plotted by treatment group for four physiologic endpoints. The plots, included in Appendix B, present the data for four endpoints as means plus or minus two standard error of the means as functions of time relative to dosing. Thus, the time that perfusion was started was approximately t = -1 hr, and dose time was approximately t = 0 hr. In Figures 3 through 14, the values on the time axis are slightly offset for each treatment group to avoid overlap of standard error bars. Treatment groups are identified as "No Topical" for untreated flaps, "EtOH" for flaps dosed with 300  $\mu$ L of ethanol, "3 mg HD" for flaps dosed with 300  $\mu$ L of 10 mg/mL HD in ethanol, and "15 mg HD" for flaps dosed with 300  $\mu$ L of 50 mg/mL

HD in ethanol. In the figures that include data prior to dosing (Figures 3, 5, 7, 9, 11, and 13), data at 15 and 45 min prior to dosing are omitted to improve clarity of the plots.

#### 2.12.3 Statistical Contrasts

Statistical contrasts were conducted with a two-way analysis of variance model at 0, 1, 2, 4, and 8 hr after dosing to test for the effects of topical applications (untreated, ethanol, 3 mg HD, and 15 mg HD) on each of four physiologic parameters. The incidence of histologic lesions were tabulated by treatment group and contrasted using Fisher's Exact Test. All tests were conducted at the 5 percent significance level.

#### 3.0 Results

Room 9 of the MREF was halved with a dividing wall and double-action doors to separate the outer, surgical preparation area from the inner, surgical area. Both areas were coated with two layers of white epoxy paint. The preparation area was fitted with a scrub sink with knee-activated valves and a supply cabinet. The surgical area was fitted with a v-top operating table, small-animal gas anesthesia machine vented into an exhaust manifold, a portable surgery light, stools, instrument stands, electrocautery instrument, and scrub equipment. Surgical supplies were obtained to match as closely as possible that used during training at NCSU-CPTC. Surgical techniques were refined to emulate as closely as possible those practiced at NCSU-CPTC.

# 3.1 Phase I: Technology Transfer

Five MREF personnel traveled to NCSU-CPTC and received training in flap surgery and perfusion during the week of May 8, 1994. Although the facilities at the MREF were not complete at that time, the training received facilitated the ordering of equipment and the design of the perfusion chambers. Four technicians attended a second training session at NCSU-CPTC during the week of January 22, 1996.

A list of flaps and the treatment each received is presented in Table 3 (Appendix C). The first flap, numbered 2501 for continuity with NCSU-CPTC accounting, was raised at the MREF on January 30, 1995 and harvested February 1, 1995. Practice flaps were raised, harvested, and either not treated or dosed with 300 µL of ethanol. Mr. Jim Brooks, a perfusion technician at NCSU-CPTC, visited the MREF during the week of March 13, 1995 to observe and make suggestions on the surgery and perfusion procedures, and to examine the data obtained. Eight of the latest 10 flaps raised at the MREF were judged by Mr. Brooks as acceptable. His assessment concluded that the technology was successfully transferred, and Phase I was completed.

#### 3.2 Phase II: Validation

Phase II commenced with the dosing of flaps 2523 and 2524 with HD in ethanol on March 22, 1995 and continued through flaps 2553 and 2554 on May 11, 1995. At the end of this set of experiments, all data and histology specimens were send to NCSU-CPTC for analysis. The NCSU-CPTC report recommended several procedural changes be instituted at Battelle. The data are presented here in sets relative to implementation of those changes.

#### 3.2.1 Flaps (2501 - 2554) Produced Prior to the NCSU-CPTC Report

There were no apparent effects, in terms of either VR or baseline-normalized VR (Figures 3 and 4, respectively, and Table 4), among flaps treated with ethanol, flaps treated with 3 mg of HD in ethanol, and flaps treated with 15 mg of HD in ethanol. In all treatment groups, mean VR ranged from approximately 45 to 52 mm Hg•min/mL at t = 0 hr (i.e., immediately before dosing commenced at approximately 1 hr after the start of perfusion), increased to a range of approximately 51 to 59 mm Hg•min/mL by t = 4 hr, and ranged from approximately 46 to 57 mm Hg•min/mL by the end of the experiment (Figure 3). The slight increase in VR between t = 1 hr and t = 4 hr was more visually apparent in the baseline-normalized VR plot (Figure 4). In all dosed groups, GU increased for the first approximately 1.5 hr after perfusion was started (Figure 5). The flaps dosed with 15 mg of HD peaked at approximately 0.65 mg/hr/g; all other

groups peaked between approximately 0.9 and 1.0 mg/hr/g. HD significantly (p < 0.05) decreased GU over the course of the experiment for some flaps dosed with 15 mg of HD relative to the ethanol controls, but the GU levels for this treatment group were depressed even before dosing. Beginning at approximately t = 2 hr, flaps generally exhibited a steady decrease in metabolic function, independent of treatment, to mean GU levels between approximately 0.24 and 0.41 mg/hr/g. The effect of a 15 mg dose of HD was more visually apparent in the CGU plot (Figure 6) and statistically significant, but again, the pre-dose health status of these flaps may have confounded treatment effects. No HD-associated blisters were observed on the flaps at the end of the experiments.

These results were inconsistent with those previously published by NCSU-CPTC, which reported that topical application of HD stimulated an increase in flap VR by a factor of approximately 2.5 to 3.0 relative to ethanol controls<sup>10</sup>. Plotted data in the paper indicate that ethanol control flaps exhibit a steady metabolism for up to 8 hr after dosing, and that 3 mg HD-dosed flaps exhibit a sustained lower GU than ethanol controls. NCSU-CPTC observed a doseresponse relationship between the concentration of HD applied, in the range of 1.25 to 10 mg/mL, and the incidence of frank blisters on flaps (verbal communications with Dr. Monteiro-Riviere ).

On May 17, 1995, the entire MREF data set and histologic specimens were sent to NCSU-CPTC for evaluation. Work on Task 92-31 was suspended pending review of the results by NCSU-CPTC personnel. A paper (Appendix D), entitled "Report on Phase I and Phase II of Battelle IPPSF Perfusion", was submitted to Battelle by NCSU-CPTC on August 4, 1995. Based on Mr. Brooks' visit and histologic evidence of residual RBCs after the flaps were flushed, NCSU-CPTC personnel selected for analysis 22 of the 54 flap experiments performed at the MREF. Of the 22 flaps selected, five were untreated, eight were dosed with ethanol, four were dosed with 3 mg of HD, and five were dosed with 15 mg of HD. The paper reported that:

- The coefficients of variation associated with physiologic parameters from MREF experiments were larger than those of the NCSU-CPTC counterparts, and
- The metabolic rate in MREF flaps began to decline between 3 and 4 hr after dosing as opposed to metabolic homeostasis in flaps prepared at NCSU-CPTC.

The report recommended that Battelle:

- Minimize the number of surgeons being trained to raise and harvest the flaps, thus reducing variability and time in surgery,
- Increase the volume of heparinized normal saline used to flush the flaps,
- Check the media for correct osmolality,
- · Investigate means of ensuring proper perfusate flow rates, and
- Wait to attach the dosing template until after the 1-hr acclimation period.
   Changes were implemented in the MREF procedures to accommodate these recommendations. There was also some speculation that the strain of swine may have had some bearing on the quality of flaps produced. All subsequent swine were obtained from Isler Genetics.

#### 3.2.2 Flaps (2555 - 2598) Produced After the NCSU-CPTC Report

The focus of the next session of flap production and testing, from August 25 to November 25, 1996, was to:

- Obtain healthy flaps by ensuring consistent surgical techniques, and flushing the harvested flaps until the exudate became clear (i.e., free of RBCs), and then
- Perform experiments that compared the effects of ethanol versus HD in ethanol (3 mg) applied topically to flaps.

Results of this set of experiments, involving 38 successful flaps out of 44 attempts, are summarized in Figures 7 through 10 and in Table 5. There were no significant HD-related effects observed in this set of flaps. Mean VR ranged from approximately 39 to 47 mm Hg•min/mL at t = 0 hr and increased only slightly, to between 43 and 51 mm Hg•min/mL, at t > 4 hr. There were no treatment-related differences in VR among the groups at any time in the experiments. Figure 8 shows that flaps dosed with 3 mg of HD exhibited a rapid, approximately 30 percent increase in baseline-normalized VR over 2 hr < t < 4.5 hr; nevertheless, GU plots (Figure 9) indicated mean control levels at t = 0 hr between 0.57 and 0.70 mg/hr/g, similar to the level for flaps dosed with 15 mg of HD in the initial set of flaps analyzed. Mean GU for all groups was stable for approximately 2 hr after dosing and then declined to a range from 0.35 to 0.40 mg/hr/g at the end of the experiment. Baseline-normalized VR and GU were significantly (p < 0.05) depressed in

ethanol-treated flaps relative to untreated flaps. CGU plots confirmed that there were no significant differences among the treatment groups in terms of metabolic function.

# 3.2.3 Experiments Performed with Media Made with a Different Bovine Serum Albumin, Flaps 2599 - 2640

Further discussion with NCSU-CPTC personnel disclosed that they had stopped obtaining bovine serum albumin (BSA) from Sigma Chemical Co. The source of BSA was now Mallinckrodt Chemical, Inc. (Paris, KY). A third set of experiments, including flaps 2599 through 2640, was performed from November 19, 1995 to March 7, 1996. This was a final attempt to validate the MREF flap production procedures by evaluating the effects of HD on the model. Flaps were either left untreated or dosed with either ethanol or 3 mg of HD in ethanol.

The results of this work are summarized in Figures 11 through 14 and in Table 6. In all treatment groups, mean VR was between approximately 37 and 43 mm Hg•min/mL at t = 0 hr and increased to a range of approximately 55 to 65 mm Hg•min/mL at t > 6 hr (Figure 11). When normalized to baseline levels (Figure 12), VR for this set of flaps increased by a range of 40 to 80 percent over the course of the experiment, but there was no apparent effect on flap vasculature associated with dosing either ethanol or HD in ethanol. The general increase in VR was likely due to using Mallinckrodt BSA in the media, as flaps in the second set of experiments, i.e., those perfused with media made with Sigma BSA, exhibited increases in mean VR of no more than 30 percent over baseline values.

Treatment group mean GU ranged from approximately 0.66 to 0.84 mg/hr/g at t = 0 hr, and remained stable until t = 2 hr (Figure 13). Thereafter, metabolism started declining until approximately t = 7 hr, when it leveled off between 0.45 and 0.55 mg/hr/g. The flaps dosed with 3 mg of HD appeared metabolically stimulated for approximately 1.5 hr after dosing, (p < 0.05 relative to ethanol controls) in contrast to what was observed in the first set of flaps dosed with 15 mg of HD. CGU failed to discriminate among the treatments, as mean CGU levels were within approximately 0.5 mg/g of each other throughout the experiment, and end-of-experiment group mean CGU levels ranged from approximately 4.4 to 4.9 mg/g.

### 3.2.4 Histopathology

The effect of BSA source was also compared by examining histologic lesion incidence rates. Table 7 presents lesion incidence rates for normal pig skin samples collected during flap raising, untreated flaps, and flaps dosed with either ethanol or 3 mg of HD, tabulated by BSA source. Table 8 presents the same data as incidence ratios, with Fisher's Exact Test results for selected intergroup comparisons.

No lesions were observed in any normal pig skin samples. Epidermal-dermal separation was observed in 80 and 58 percent of the untreated Sigma and Mallinckrodt BSA flaps, respectively. Surprisingly, this endpoint for dermatotoxicity was reduced when either ethanol or HD in ethanol was applied to Sigma BSA flaps (29 percent), but remained relatively unchanged for Mallinckrodt BSA flaps (61 and 71 percent), respectively. The difference between untreated and ethanol treated flaps bordered on being statistically significant (p = 0.058) for flaps perfused with the Sigma BSA media, but not with media containing the Mallinckrodt BSA (p = 1.000). Also, there was no effect of including HD in the ethanol for this parameter with either BSA source (p = 1.000).

No flap treatment or BSA source-related effects were apparent for either intra- or intercellular edema (p = 1.000). However, the incidence of dark basal cells, another index of HD toxicity, was higher in ethanol-treated Mallinckrodt flaps (33 percent) than untreated controls (8 percent, p = 0.193) and increased to 50 percent with HD treatment (p = 0.664, relative to ethanol controls). There were apparently no similar treatment effects in the Sigma BSA flaps. None of the differences associated with flap treatment were considered statistically significant for either edema or dark basal cell incidence rates.

#### 3.2.5 Gross Lesions

The incidence of frank blisters by flap set and treatment group is presented in Table 9. Frank blisters were not observed on any of the flaps in the first set, i.e., flaps harvested from Shady Side Farms swine and perfused with media made with Sigma BSA. In the second set of

flaps (Isler Genetics swine, Sigma BSA in the media), no blisters were observed on either untreated flaps or flaps dosed with 3 mg of HD in ethanol, but in the ethanol control group, 2 of 12 flaps exhibited blisters. In the third set of flaps (Isler Genetics swine, Mallinckrodt BSA in the media), blisters were observed in approximately one-third of the flaps regardless of treatment. NCSU-CPTC personnel indicated that the increased rate of blister formation was likely due to the general increase in VR associated with using media made with Mallinckrodt BSA. Fisher's Exact Tests for the effect of BSA indicated significant (p < 0.05) increases in blister rates among untreated flaps and HD-treated flaps perfused with Mallinckrodt BSA media, but not for ethanol-treated flaps. None of the Fisher's Exact Test results for topical treatment effects was statistically significant (p > 0.05). The data were presented to USAMRICD personnel at the semi-annual technical review in April 1996, and the decision was made to stop flap production.

# 3.3 Phase III, Decision Tree Network Module Development

The third phase of this task was not initiated due to the absence of HD treatment-related effects in the earlier phases.

# 3.4 Phase IV, Test Material Evaluation

The fourth phase of this task was not initiated due to the absence of HD treatment-related effects in the earlier phases.

# 4.0 Conclusions

The IPPSF laboratory established at NCSU-CPTC was duplicated at the MREF as closely as possible, with slight modifications in the design of the perfusion chamber to accommodate dosing CSM in a fume hood, and modernization of equipment used to monitor experimental parameters. Duplication of methods and SOPs, two training sessions of Battelle personnel at

NCSU-CPTC, and a visit to Battelle by a perfusion technician from NCSU-CPTC were essential parts of the transfer of techniques for raising, harvesting, and perfusing flaps.

Battelle completed Phase I (Technology Transfer) with the production of 22 flaps that were deemed acceptable by NCSU-CPTC personnel. Variability in Battelle data was somewhat higher than that in similar data from NCSU-CPTC, and flaps obtained at the MREF generally exhibited a gradual decline in metabolism not seen in NCSU-CPTC flaps. There were no conclusive treatment-related effects observed in flaps, either in terms of VR, GU, CGU, or the incidence of histologic or grossly observable lesions.

Subsequent to finding a different source of SPF swine and implementing several minor modifications in technique recommended by NCSU-CPTC, Battelle produced 43 flaps and either left them untreated or dosed them with either ethanol or 3 mg of HD in ethanol. Again, there were no HD-related effect observed in this set of flaps. Ethanol appeared to depress baseline-normalized VR and GU relative to no treatment, and seemed to have a more profound effect on the flaps than did HD. The persistent, gradual decline in flap metabolism stimulated a closer investigation of the perfusion media.

A final set of 42 flaps was produced and perfused with media made with the new source of BSA. Treatment groups were the same as in the second set of flaps, i.e., flaps either remained untreated or were dosed with either ethanol or 3 mg of HD in ethanol. Increases in three endpoints were observed relative to previous flaps: VR at t > 2 hr after dosing was increased, and the incidence of epidermal-dermal separation and the incidence of frank blisters increased. These changes occurred across all groups, however, without any association with application of either ethanol or HD. HD appeared to temporarily stimulate flap metabolism relative to ethanol controls. There was a weak association (p = 0.058) of an increase in the incidence of dark basal cells with application of ethanol in this final set of flaps.

Attempts to refine the techniques, including

- Limiting the number of surgeons for training and flap production in order to reduce both stress on the anesthetized swine and variability among flaps,
- Increasing the volume of media used to flush RBCs from the harvested flap,
- · Checking each batch of perfusion media with a micro/osmometer, and

• Using a different supplier of swine,

had no effect on the physiologic responses of flaps to HD application. Under conditions at Battelle, the IPPSF model was not as dynamic in its response to HD as that reported by NCSU-CPTC.

The IPPSF model was transferred to Battelle, but an experimental paradigm for testing the dermatotoxic effects of HD applied topically could not be developed. NCSU-CPTC has published papers demonstrating flap homeostasis for up to 9 hr after initiating perfusion, and they have used this model primarily to measure transdermal penetration of xenobiotics. The IPPSF may be much better utilized in such experiments measuring or comparing skin penetration by xenobiotics.

# 5.0 Record Archives

Records pertaining to the conduct of Task 92-31 are contained in Battelle laboratory three-ring binders and record books and are archived at the MREF. All original data will be maintained at Battelle or forwarded to the U.S. Army following acceptance of the final report.

# 6.0 Acknowledgments

The name, role in the study, and highest academic degree of each of the principal contributors in this study are:

John B. Johnson

MREF Manager

D.V.M., M.S.

Thomas H. Snider

Study Director

B.S.

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A.S.

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APPENDIX A

**MREF Protocol 97** 

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

> Study Performed by Battelle Memorial Institute 505 King Avenue Columbus, Ohio 43201-2693

- 1. <u>Principal Investigator and Manager</u>: David W. Hobson, Ph.D., D.A.B.T., Medical Research and Evaluation Facility (MREF)
- 2. Study Director: Thomas H. Snider, B.S., D.A.B.T.
- 3. Study Veterinarians: Allen G. Manus, D.V.M. Frances M. Reid, D.V.M., M.S., D.A.B.V.T., D.A.B.T.
- 4. Sponsor: U.S. Army Medical Research and Development Command (USAMRDC)
- 5. <u>Sponsor Monitor</u>: LTC Don W. Korte, Jr., Ph.D., U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)
- 6. Background: Researchers at North Carolina State University (NCSU), under contract with USAMRDC, have developed an isolated perfused porcine skin flap (IPPSF) model for studying vesicant injury<sup>1</sup>. The IPPSF is produced by resecting an elliptical area of ventral abdominal skin on a female weanling swine and suturing together the lateral and distal edges to form a single-pedicle, tubular flap with circulation intact. The injured tissue is allowed to heal for two days, and the flap is excised and placed into a perfusion chamber. This technique provides an *ex vivo* skin model with normal anatomical structure and microcirculation which produces microvesication upon exposure to sulfur mustard (HD). This task will transfer this technology to the MREF and further develop it as an advanced screening module within a Decision Tree Network (DTN) for evaluating systemic prophylactic and therapeutic treatments (SP&TTs) against topical exposures to HD.

Riviere, J.E. and Monteiro-Riviere, N.A. (1991) The isolated perfused porcine skin flap as an <u>in vitro</u> model for percutaneous absorption and cutaneous toxicology. <u>Crit. Rev.</u> Toxicol. 21:329-44.

- 7. <u>Objectives</u>: After successful transfer of technology from NCSU to MREF (Phase I), the development of the IPPSF into a screening module will be accomplished in three subsequent phases with these specific objectives:
  - A. Phase II perform a set of routine experiments with 30 IPPSFs (15 swine) at the MREF that produces results statistically equivalent to previous results obtained at NCSU;
  - B. Phase III use 30 IPPSFs (15 swine) to develop an experimental procedure that can be used to effectively discriminate among candidate SP&TTs in their ability to protect against HD-induced injury; and
  - C. Phase IV evaluate and rank order up to seven SP&TTs, to be determined by USAMRICD, with 20 IPPSFs each (using a total of 70 swine in this phase).
- 8. Experimental Design: Methods for the surgical production and harvesting of the IPPSF, and for set up, preparation, maintenance and cleaning of the IPPSF perfusion chamber, are detailed in MREF SOPs. This protocol includes procedures for administration of a SP&TT, topical exposure of IPPSFs to HD, and for quantifying the irritation response with these and other possible endpoints:
  - dextrose utilization and lactate production,
  - vascular resistance,
  - gross vesication, and
  - histologic evidence of microvesicles.

A dilute solution of HD on a vehicle solvent (nominally ethanol) is applied to the IPPSF to produce a diffuse, moderate irritation response. The focal, severe irritation produced by applying a droplet of neat HD to the IPPSF would likely be less responsive to therapeutic measures. Thus, candidate SP&TTs that are effective against milder challenges would fail such a screen and go unidentified. In order to improve test sensitivity to SP&TT efficacy, a dilute HD solution is applied. In an alternative model, an IPPSF is exposed to an environment of HD vapors.

This protocol includes methods for three types of studies, i.e., (1) a validation study to evaluate the quality of IPPSF technology transfer to MREF, (2) pilot studies to investigate test conditions for evaluating SP&TTs, and (3) efficacy evaluations of candidate SP&TTs. Due to the expense of facilities required to sustain each IPPSF, a limited number of IPPSFs are prepared for dosing on a given day. Treatment groups

nominally consist of 15 (validation) or 10 (efficacy evaluations) replicate IPPSFs each, randomized across treatment groups to reduce the effects of workers gaining technical proficiency and other trends associated with minor enhancements in the procedure.

In the validation study, a standard solution of HD in vehicle is applied to an IPPSF, and perfusate is sampled at specific exposure times and analyzed for dextrose utilization and lactate production. Vascular resistance is continuously monitored before dosing and for up to 8 hr after dosing. Dextrose utilization, lactate production, and vascular resistance are expressed as percentages of baseline (predose) levels. At 8 hr after dosing, the IPPSF is grossly examined, decontaminated, removed from the perfusion chamber, and sampled for histologic examination.

In the SP&TT efficacy tests, a candidate SP&TT material is administered in the perfusate at a standard interval either before or after the exposure of the IPPSF surface to HD. Dextrose utilization, lactate production, and vascular resistance are measured in the naive IPPSF, after HD application, and again after SP&TT treatment. The values are normalized to naive levels.

- A. Test Systems Specific pathogen-free, weanling female swine were specified for use in this study by the NCSU investigators, who have previously demonstrated that porcine skin parallels human skin in response to HD and other irritants. Each swine provides two areas for production and harvesting of an IPPSF, of which one IPPSF can serve as the control for the contralateral, test IPPSF. Donor swine may be returned to their source in a state of full health after these procedures.
  - (1) Animals SPF Yorkshire/Hampshire cross female swine; Supplier: Shady Side Farm, Powell, OH
  - (2) Initial Weight 18 to 30 kg
  - (3) Quarantine Swine are held in isolation and observed for clinical illness for at least 7 days prior to study initiation. Quarantine may be performed at Battelle's King Avenue animal facility or at the MREF.
  - (4) Acclimation All swine are held at the MREF at least 24 hr prior to study initiation.

- (5) Selection Swine that are in good physical condition after a minimum 7-day quarantine period become candidate donors. Individuals are then selected for study on the basis of health, proper weight, and condition of inguinal skin. The swine are randomly assigned to weight-homogenized treatment groups for use on study in a randomized sequence.
- (6) Animal Identification Ear tag or tattoo; positive identification is required for each swine upon admission to quarantine. At a minimum, cage cards identify animal number, sex, supplier, and date of receipt for each swine.
- (7) Housing Swine are housed individually in stainless steel cages equipped with automatic watering systems.
- (8) Lighting Fluorescent lighting, light/dark cycle is 12 hr each per day.
- (9) Temperature Maintained at 21 C (± 3 C).
- (10) Humidity Maintained at 50 percent (± 10 percent).
- (11) Diet Purina Certified Swine Feed is available at all times. No contaminants are known to be present in the feed which would interfere with or affect the results of the study.
- (12) Water Supply Water is supplied from the public water system and given <u>ad</u> <u>libitum</u>. No contaminants are known to be present in the water which would affect the results of the study.
- (13) Laboratory Animal Welfare Practices Battelle's Animal Resources Facilities have been registered with the U.S. Department of Agriculture (USDA) as a research facility (Number 31-21) since August 14, 1967, and are periodically inspected in accordance with the provisions of the Federal Animal Welfare Act. In addition, animals for use in research are obtained only from laboratory animal suppliers duly licensed by the USDA. Battelle's statement of assurance regarding the Department of Health and Human Services policy on humane care of laboratory animals was accepted by the Office of Protection from Research Risks, National Institutes of Health (NIH), on August 27, 1973. Animals at Battelle are cared for in accordance with the guidelines set forth in the "Guide for the Care and Use of Laboratory Animals" (NIH Publication Number 85-23) and/or in the regulations and

standards as promulgated by the Agricultural Research Service, USDA, pursuant to the Laboratory Animals Welfare Act of August 24, 1966, as amended.

- (14) Accreditation On January 31, 1978, Battelle Memorial Institute received full accreditation of its animal-care program and facilities from the American Association for Accreditation of Laboratory Animal Care (AAALAC). Battelle's full accreditation status has been renewed after every inspection since the original accreditation. The MREF is a part of the facilities granted full accreditation.
- (15) Animal Care During Surgery Each swine is anesthetized and taken to a surgery suite for IPSSF production, and again two days later for IPPSF harvesting. Health status is monitored for heart rate, temperature, and respiration. After each procedure, the swine is returned to its cage for recovery from anesthesia.

## B. Experimental Overview

- (1) Outline of Studies Until the test procedure is performed routinely at the MREF, only one swine will be used per day. The following study design implies a single swine per day use rate, but this rate may change to two or more swine per day as surgical teams become more proficient.
  - (a) Validation Study (Phase II) The validation study is conducted over 15 replicate days of two IPPSFs per day, for a total of 30 IPPSFs. Each swine will contribute two IPPSFs, of which one will be randomly selected to serve as a vehicle control, and the other will be dosed with an equivalent volume of HD in vehicle. Data will be paired by swine to determine the effects of HD on IPPSF physiology. If one of the IPPSFs is unusable, then the experiment will proceed without that IPPSF. The MREF model will be considered valid by showing that the MREF results are consistent with those previously obtained at NCSU under similar test conditions.

- (b) DTN Test Module Development (Phase III) This phase is conducted with 30 IPPSFs and involves development of the test conditions necessary to screen systemic prophylactic and therapeutic treatments against HD injury. Ten IPPSFs are used in each of the following investigations to determine test conditions:
  - (i) HD Phase Study The criteria for selection of a HD phase (liquid or vapor) for exposure is based on whether microvesicles are produced, and the degree of within-group variability in IPPSF physiologic responses. The phase that produces microvesicles more consistently and renders physiologic changes with less variability will be selected.
  - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection The optimal dose level or exposure time (depending on the outcome of the HD phase study) is an exposure that produces a physiologic and/or histopathologic response to a degree that might be ameliorated by a successful SP&TT. Thus, producing a moderate or marked response is the objective.
  - (iii) SP&TT Timing Study An optimal time relative to HD exposure for treatment with SP&TTs is determined. Initial pretreatment or posttreatment times are based on the biochemical mechanisms responsible for the hypothetical efficacy of an individual or class of SP&TTs. Selection of an optimal treatment time relative to dosing is based on the performance of a sponsor-identified SP&TT administered at various times either before or after the HD exposure.
- (c) SP&TT Efficacy Tests (Phase IV) Each SP&TT candidate is tested over 10 replicate days of two IPPSFs per day, for a total of 10 IPPSFs treated with the candidate SP&TT and 10 positive control (or standard) IPPSFs. At the discretion of the Study Director, fewer than 10 replicates may be performed if the data on hand are sufficient to statistically discriminate among the candidates. SP&TTs are administered intravascularly in the perfusate, either before or after the HD challenge.

## (2) Definition of Treatment Groups

- (a) Validation Study (Phase II) On each of 15 replicate days, one IPPSF is treated with a dilute solution of HD in vehicle (nominally ethanol), and the other is treated with an identical volume of vehicle.
- (b) DTN Test Module Development (Phase III)
  - (i) HD Phase Study On each of five replicate days in the HD phase study, one IPPSF is dosed with a standard volume of HD/solvent, and the other is subjected to an atmosphere of vaporous HD.
  - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection In this study, two IPPSFs are identically exposed to HD at increasing levels across the five test days. If liquid exposures are preferred, then the concentration is increased in a constant volume. If vaporous HD exposures are preferred, then the exposure times are increased.
  - (iii) SP&TT Timing Study Treatment times relative to HD exposure are selected and randomized for testing. Nominally, these are 60 and 30 min before dosing and 5, 30, and 60 min after dosing. Other treatment times may be substituted for these at the discretion of the study director after consultation with the sponsor. On each of five replicate test days, a sponsor-identified SP&TT is administered into the perfusate solution at two of the predetermined treatment times. The treatment times are determined by a Latin square so that the IPPSFs used on a given test day are not treated at the same time, but each of the five treatment times will be represented by two replicates at the end of the study.
- (c) SP&TT Efficacy Tests (Phase IV) On each replicate day, one IPPSF is used as a no-SP&TT, positive (HD/vehicle dosed) control, and the other is treated with a candidate SP&TT followed by (or preceded by, as the case may be) a dilute solution of HD in vehicle. The positive control is included as a swine-specific check on process quality control. At the discretion of the study director after consultation with the

sponsor, this design may be modified to treat the positive control IPPSF with a standard SP&TT when

- (i) such a standard SP&TT is identified by the sponsor and
- (ii) sufficient data are on hand to use IPPSFs treated with the standard SP&TT as process controls.

Thereafter, statistical comparisons will be made between the candidate and standard SP&TTs.

#### C. Test Articles

(1) Systemic Prophylaxis and Therapeutic Treatments - SP&TTs are supplied by the sponsor. It is the responsibility of the sponsor to ensure that appropriate identification (batch number, lot number, physical state, etc.), expiration date (if available), safety and storage data are supplied for each candidate SP&TT received by the MREF.

## (2) Irritant

- (a) HD is supplied by USAMRICD. Purity, appropriate identification (batch number, lot number, state), and stability data are supplied by USAMRICD. Purity and stability are confirmed periodically by Battelle.
- (b) Surety, security, and safety procedures for the use of CSM are thoroughly outlined in facility plans, in personnel requirements for qualifications to work with agents, and in agent storage and use standard operating procedures. All safety procedures given in Battelle SOP MREF I-002, entitled "Standard Operating Procedure (SOP) for the Storage, Dilution, and Transfer of GA, GB, GD, TGD, VX, HD, HD/L, and L When CSM Concentration/Quantity is Greater Than Exempt Levels", and Battelle SOP MREF II-010, entitled "Standard Operating Procedure (SOP) for the Application of HD, L, and HL Chemical Surety Materiel to the Isolated Perfused Porcine Skin Flap", are observed during handling and dosing of HD.

- D. Producing and Harvesting the IPPSF Procedures for administering and maintaining anesthesia, and for the surgical production of and harvesting an IPPSF are presented in Battelle SOP MREF VII-023, entitled "Standard Operating Procedure (SOP) for the Surgical Preparation of the Isolated Perfused Porcine Skin Flap". A brief description of the procedure follows.
  - (1) Anesthesia The swine is premedicated with 1.5 mg/kg intramuscularly (i.m.) of atropine sulfate. Anesthesia is induced with ketamine hydrochloride (11 mg/kg i.m.) and xylazine hydrochloride (1.5 mg/kg i.m.). The swine is placed on a surgical table on its dorsum, and an endotracheal tube is inserted. Anesthesia is maintained via halothane inhalation (1 to 1.5 percent). These anesthetics may be modified as directed by NCSU consultants.
  - (2) IPPSF Production - The swine is prepared for aseptic surgery in the caudal abdominal and inguinal regions. A sterile marking pen is used to place reference marks on the skin in the caudolateral epigastric region. Skin incisions are made around the caudal superficial epigastric artery within a 4- by 12-cm rectangle. Major superficial vessels are ligated and divided, and minor vessels are cauterized. Subcutaneous tissue is dissected away from the skin. Dissection continues until the only tissue connecting the flap to the donor are the caudal superficial epigastric artery, paired venae comitantes, and immediate connective tissue. Starting at the caudal end, the sides of the flap are apposed and sewn together. Fat is trimmed away from the flap edges, if necessary. Three tissue layers are separately apposed and sewn together in sequence: deep subcutaneous tissues, superficial subcutaneous tissues, and skin incision edges. The wound site and flap are bandaged, and the flap is ligated to the cranial end of the wound to immobilize it. The swine is allowed to recover from anesthesia and returned to individual housing.
  - (3) IPPSF Harvesting Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. Care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are severed, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's

wound is closed, and the swine is allowed to recover from anesthesia and returned to individual housing. Alternatively, the swine may be anesthetized with Beuthanasia solution. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

- E. Preparation of IPPSF for Testing After excision from the swine, cannulation, and commencement of perfusion, the IPPSF is allowed to reach a steady state over an acclimation period of nominally 1 hr in the perfusion chamber.
- F. Baseline Values After acclimation, baseline data for the appropriate endpoints, such as vascular resistance, dextrose utilization, and lactate production are collected.
- G. Systemic Prophylactic Treatments SP&TTs are administered at a test-specified time relative to exposure to dilute HD. Treatment schedules may be changed by the study director after consultation and agreement by the sponsor. SP&TTs may be administered to the IPPSF either topically or in the perfusate according to standard methods established at the MREF.

## H. Application of HD to IPPSF

- (1) Exposures of HD are made in fume hoods approved for use with chemical surety materiel. During dosing and throughout the exposure period for each test, the IPPSF is positioned inside the perfusion chamber in a hood.
- (2) Applications of HD are made at test-specified times and consist of a constant volume of application. The challenge dose concentration and volume for a liquid exposure may be changed at the discretion of the study director after consultation and agreement by the sponsor. All safety procedures given in Battelle SOP MREF I-002 are observed during handling and dosing of HD. Instructions for applying a solution of HD onto an IPPSF and for exposing an IPPSF to a HD vapor environment are specified in Battelle SOP MREF II-010.

A 10- $\mu$ L (or other, sponsor-specified) volume of HD/vehicle is dispensed from a syringe at the distal tip of the IPPSF. A Hamilton 7001N or other suitable syringe with a sharp-tip, positive displacement needle may be used to provide a point source, air-dropped delivery. A larger syringe may be used in a calibrated micrometer-driven dosing device (MDDD) to administer the

agent solution. If a droplet of HD/vehicle remains on the end of the needle, the needle may be brought down close to the skin surface so as to "wick" off the droplet.

- I. Physiologic Monitoring Immediately after agent dosing, the perfusion chamber is sealed, and the perfusion period begins. The perfusion chamber temperature and humidity are monitored and regulated. Physiologic processes such as efferent perfusate dextrose and lactate concentrations, afferent perfusion pressure, and perfusate flow rate are periodically monitored.
- J. Study-Specific Decontamination At the end of the experiment, the IPPSF is decontaminated to chemically destroy any residual HD. A 4- by 4-inch gauze pad is grasped with tongs, soaked in a solution of 0.5 percent sodium hypochlorite (NaOCl), and gently wiped over the IPPSF epidermal surface. Likewise, two other gauze pads are sequentially soaked in distilled water and wiped over the IPPSF to rinse off any residual bleach.

## K. Pathology

- (1) Gross Lesion Evaluation The IPPSF is visually examined for development of skin color or texture changes, edema, and blisters.
  - (a) Skin color or texture changes are described using a consistent set of descriptors.
  - (b) Edema is scored according to the following:

No edema	0
Very slight edema (barely perceptible)	1
Slight edema (edges of the lesion area are	
well-defined by definite raising)	2
Moderate edema (raised approximately	
one millimeter)	3
Severe edema (raised more than one millimeter	
and extending beyond the area of exposure)	4

(c) Blisters are described using a consistent set of descriptors according to their pattern, area of skin involvement, and general degree of elevation above the peripheral normal skin.

- (2) Pathology The afferent and efferent cannulae are removed from the IPPSF, which is prepared for study-specific histologic processing. Samples of the IPPSF are collected and placed into a solution of the appropriate fixative. Each specimen is identified by placing it into a labeled jar or cassette. Specimens are identified by task number, charge account number, study director, date and time of tissue harvesting, and swine number. A warning label stating that the skin samples were exposed to HD is affixed to the outside of each container and to the outside of the box used for transportation. All samples are retained at the MREF for 24 hr before being transported to another facility for histologic processing. After fixation, they are processed for routine hematoxylin and eosin staining and histopathologic evaluation by light microscopy. Each specimen is evaluated, as a minimum, for microvesication.
- L. General Decontamination and Perfusion Chamber Cleaning The IPPSF support table and all other surfaces in the perfusion chamber that were potentially in direct contact with HD are decontaminated with a 5 percent solution of NaOCl. Other details regarding cleaning of perfusate containers, tubing and related equipment are given in Battelle SOP MREF II-011, entitled "Standard Operating Procedure (SOP) for Cleaning the IPPSF Perfusion Chamber and Apparatus".

#### M. Statistical Methods

- (1) Quality Control Standard quality control methods are employed to establish a range of tolerable control values for one or more of the physiologic parameters at naive, pretreatment readings. Initially, the control data are checked against results from NCSU experiments, but after completion of the Validation Phase, an MREF data base will also be compiled for quality control. Control charts are maintained for positive control (no SP&TT) and for a standard SP&TT, if identified.
- (2) Statistics Continuous (quantitative) data are tabulated within treatment groups and summarized using univariate statistics. Histopathologic data are tabulated and summarized as incidence frequencies. Statistical comparisons are performed, depending on the type of data and the objective for each phase of the task.

- (a) Validation Study (Phase II) Differences between results from vehicle controls and HD/vehicle-dosed IPPSFs are determined for each swine. A paired Student's t-test is performed on each physiologic endpoint. If more than five swine produce only one useable IPPSF, then an unpaired Student's t-test is also performed, using raw data without calculating differences for each pair of IPPSFs.
- (b) DTN Test Module Development (Phase III)
  - (i) HD Phase Study The variances from both groups are subjected to an F test to determine whether they are statistically different for each parametric endpoint. A nonparametric analysis of variance (ANOVA) test determines whether the HD phases produce significantly different incidence frequencies of histopathologic findings.
  - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection Data are plotted as a function of the degree of HD exposure, whether it be HD concentration or exposure period. An exposure level is selected for screening SP&TTs that optimizes the chances of detecting an ameliorating effect, that is, one that is on a linear portion of the dose-response curve for each endpoint. A probit analysis is performed if the amount of data exists to warrant one.
  - (iii) SP&TT Timing Study ANOVA is performed on parametric data to determine whether there are any significant trends associated with SP&TT treatment time relative to HD exposure.

    Nonparametric ANOVA is performed to detect differences among groups for quantal endpoints.
- (c) SP&TT Efficacy Tests (Phase IV) Statistical tests are performed to determine whether normalizing candidate SP&TT data to the control (or standard) IPPSF data reduces the variability within treatment groups. The data, whether raw or normalized, are contrasted by ANOVA and subsequent Tukey tests to determine significant differences between each combination pair of candidate SP&TTs. The candidate SP&TTs are rank ordered.

## 9. Records to be Maintained:

- A. HD and SP&TT inventory, specifications, and usage,
- B. Dosage preparation and administration,
- C. Animal receipt and quarantine records,
- D. Animal data from all tests performed, and
- E. Decontamination results and disposal records

## 10. Reports:

A letter report is submitted for each phase of work in this task. A draft final report is prepared and submitted within 30 days after completion of the task. It includes at least the following:

- A. Signature page for key study individuals and their responsibilities,
- B. Experimental design,
- C. Ex vivo test data,
- D. CSM Application procedures,
- E. Tabulation of response data for each exposure, or for each SP&TT tested,
- F. Statistical methodology used, and
- G. Discussion.

# 11. Approval Signatures:

Thomas A Sinder	11/24/9.
Thomas H. Snider, B.S., D.A.B.T. Study Director	Date

Tavidle. Holson	12/1
David W. Hobson, Ph.D., D.A.B.T.	Date
Principal Investigator and Manager	
Medical Research and Evaluation Facility	

Medical Research and Evaluation Facility	
Vari Ostoto	<u>12/17/93</u>
David Stitcher	Date
	Dute
Certified Industrial Hygienist	
Medical Research and Evaluation Facility	

allan I. Manus	12/17/93
Allen G. Manus, D.V.M.	Date/ /
Study Veterinarian	

LTC Don W. Korte, Jr., Ph.D.

USAMRICD COR

2/19/
Date

MREF Protocol 97 Medical Research and Evaluation Facility February 18, 1994 Page 16

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 1

Change: On page 9, replace Section 8.D.(7) with the following (additions are in bold type):

IPPSF Harvesting - Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. Care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are severed, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's wound is closed, and the swine is allowed to recover from anesthesia and returned to individual housing. The condition of each swine is assessed by a Battelle staff veterinarian following collection of skin flaps, and if the animal is debilitated, it is euthanatized with Beuthanasia or other approved euthanasia solution and the carcass incinerated. If the swine is in good condition, then it is donated or sold to a local pork producer. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

Reason:

The only treatment these animals will have undergone is anesthesia with associated non-invasive surgery to produce and then excise skin flaps. The withdrawal times (i.e., the time after treatment with a drug that animals must be held prior to sending to slaughter) for the anesthetic/analgesic agents that are to be administered is relatively short, only a week or so. The pigs used in this study will be much lighter than the normal market weight of approximately 240 pounds, and therefore will require feeding for a prolonged period before being sent to a sale.

Impact: This change will have no impact on the study.

Thomas H. Snider, B.S., D.A.B.T.

Study Director

Date

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LTC Don W. Korte, Jr., COR

**USAMRICD** 

MREF Protocol 97 Medical Research and Evaluation Facility January 6, 1995 Page 17

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 2

Change: On page 5, replace Section 8.A.(11) with the following (deletions are shown as stricken, and additions are shown in bold type):

Diet - Purina Certified Swine Feed or other veterinarian-approved swine feed is available at all times. No contaminants are known to be present in the feed which would interfere with or affect the results of the study.

Reason:

The cost of having a lot of swine feed certified by Purina (quoted at \$1500) is too high to justify in terms of certifying the experimental conditions of a study outside the purview of Good Laboratory Practices regulations. This amendment also allows continuity in the swine's feed after shipment from the supplier in the event that the swine experience health problems when given Purina feed.

Impact: This change will have no impact on the study.

Thomas H. Snider, B.S., D.A.B.T.

Study Director

Date

LTC Richard R. Stotts, COR

**USAMRICD** 

MREF Protocol 97 Medical Research and Evaluation Facility May 8, 1995 Page 18

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 3

Change: On pages 9 and 10, replace Section 8.D.(3) with the following (deletions are shown as stricken, and additions are shown in bold type):

IPPSF Harvesting - Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. The peripheral surgery site is cleaned with surgical scrub solution, and care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are clamped, severed, and ligated, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's wound is closed, and The swine is allowed to recover from anesthesia and returned to individual housing. Alternatively, the swine may be anesthetized with Beuthanasia or other, veterinarian-approved euthanasia solution. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

Reason:

Asepsis is not required during the harvesting surgical procedure. The skin surface near the flap is cleaned with scrub solution to remove debris, but application of scrub solution to the flap may alter its transdermal characteristics and must be avoided. The flap is not sutured closed, as this may increase flap turgidity, an undesireable characteristic in a naive flap. Leaving open the remaining wounds, which are approximately 4 x 4-cm square each, promotes healing relative to suturing the wounds closed. Other euthanasia solutions that are more humane than Beuthanasia may become evident in the future. Any sutures left in the swine are made of 2-0 or 3-0 gut ligature, which dissolve and do not require removal.

Impact:

A few of these changes will enhance the success of harvesting a normal flap, but otherwise are intended to minimize discomfort in the swine.

Thomas H. Snider, B.S., D.A.B.T.

5-8-95

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Study Director

LTC Richard R. Stotts, COR

**USAMRICD** 

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Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

Protocol Amendment No. 4

Change 1: Page 1, Section 1.

Change to: "Co-Principal Investigator and Manager: John B. Johnson, D.V.M., Medical Research and Evaluation Facility (MREF)".

Reason for change:

The principal investigator and manager has changed.

Change 2: Page 1, Section 3. Study Veterinarians.

Change to: "Tracy A. Peace, D.V.M. Frances M. Reid D.V.M., M.S., D.A.B.V.T., D.A.B.T."

Reason for change:

A study veterinarian has changed.

Change 3: Page 1, Section 4. Sponsor.

Change to: "U.S. Army Medical Research and Materiel Command (USAMRMC)".

Reason for change:

The name of the sponsoring organization has been changed.

Change 4: Page 1, Section 5. Sponsor Monitor.

Change to: "LTC Richard R. Stotts, D.V.M., Ph.D., U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)".

## Reason for change:

The sponsor monitor has changed.

Approved by:

Thomas H. Snider, B.S., D.A.B.T.

Study Director

11-8-9

Date

LTC Richard R. Stotts, D.V.M., Ph.D.

USAMRICD COR

APPENDIX B

Figures

Figure 1. Control Chart of Dilute HD Doses Applied onto IPPSFs, with 95 Percent Confidence Limits

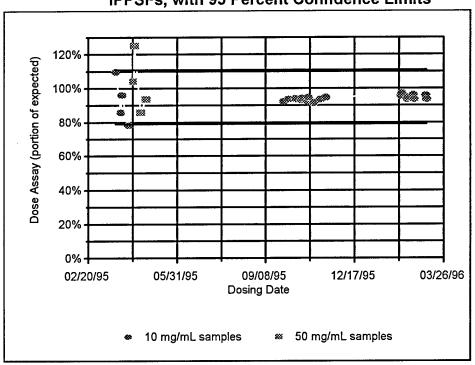


Figure 2. Schematic of the Perfusion Chamber

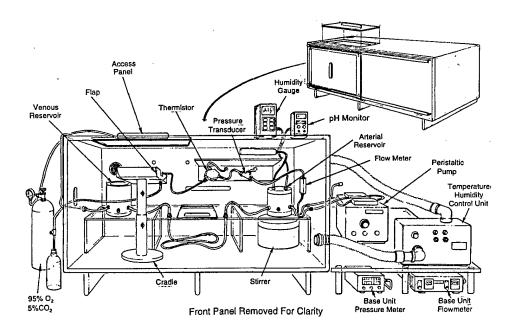


Figure 3. Vascular Resistance Averaged by Treatment Group for Flaps 2501 to 2554

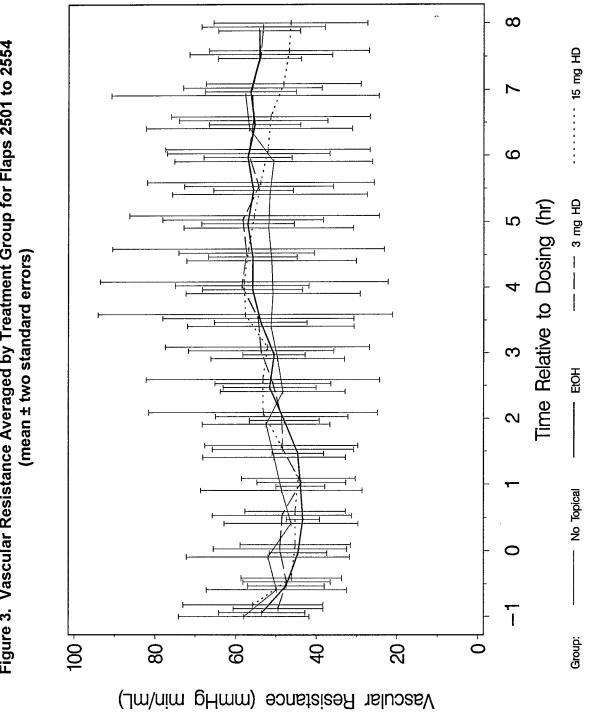


Figure 4. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2501 to 2554

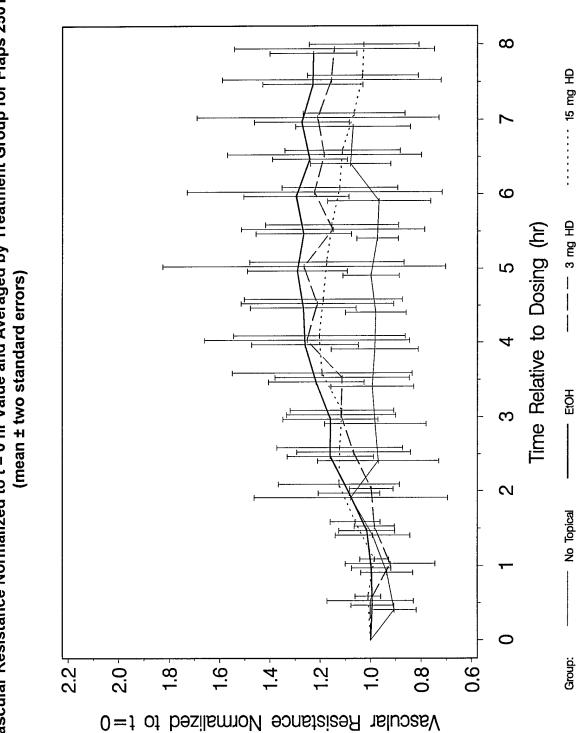


Figure 5. Glucose Utilization Averaged by Treatment Group for Flaps 2501 to 2554

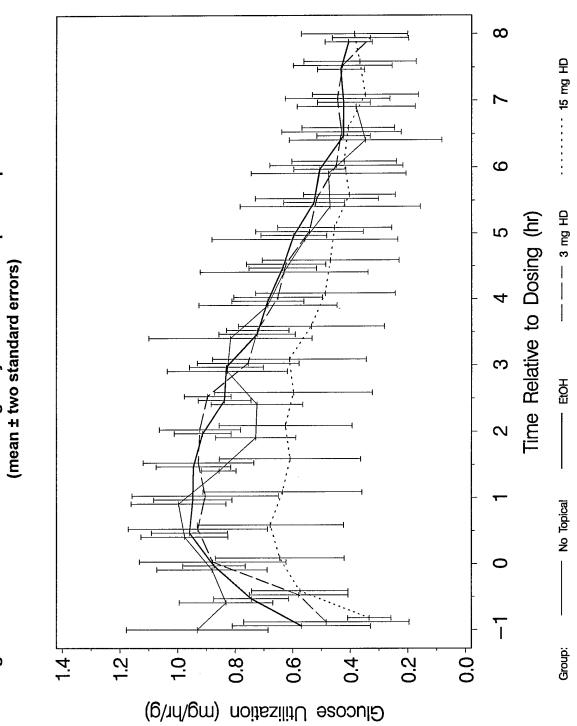


Figure 6. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2501 to 2554

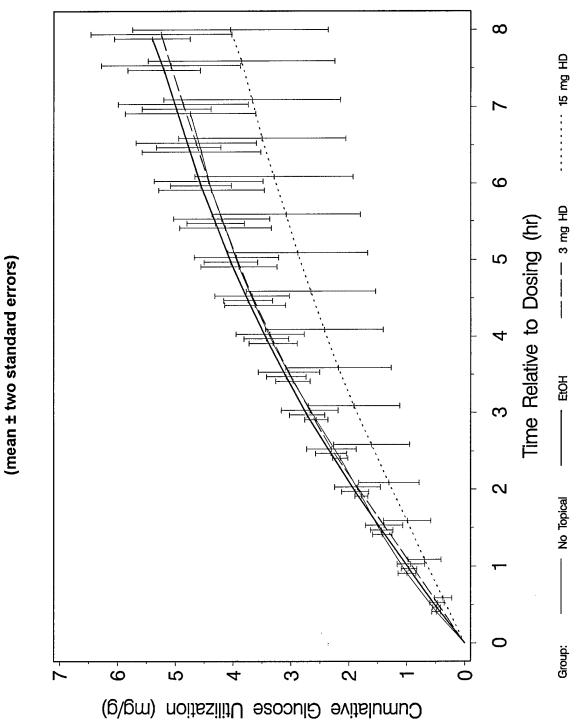
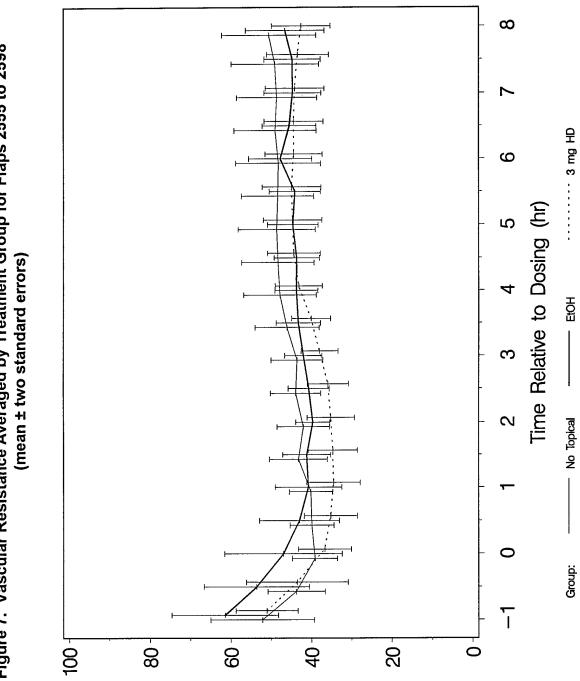


Figure 7. Vascular Resistance Averaged by Treatment Group for Flaps 2555 to 2598



Vascular Resistance (mmHg min/mL)

Figure 8. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2555 to 2598

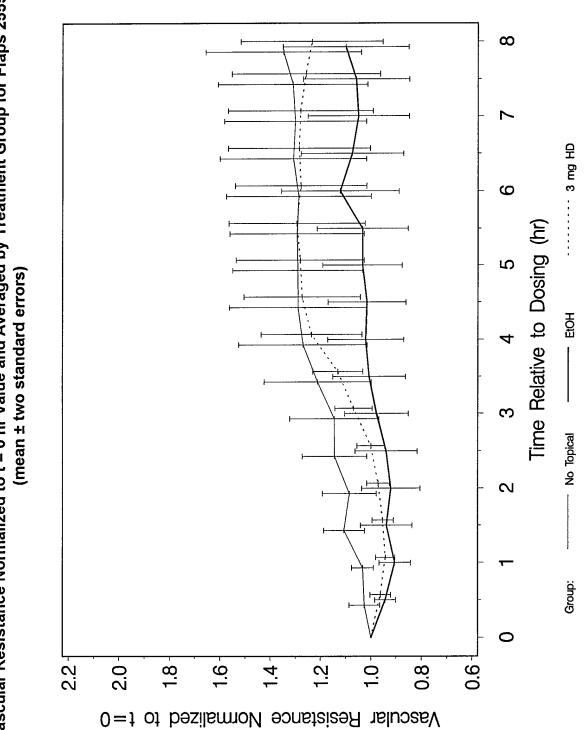


Figure 9. Glucose Utilization Averaged by Treatment Group for Flaps 2555 to 2598

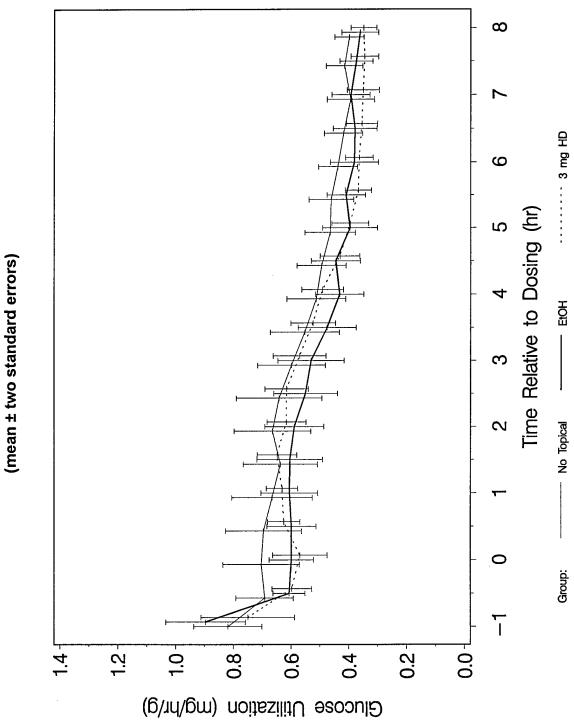


Figure 10. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2555 to 2598

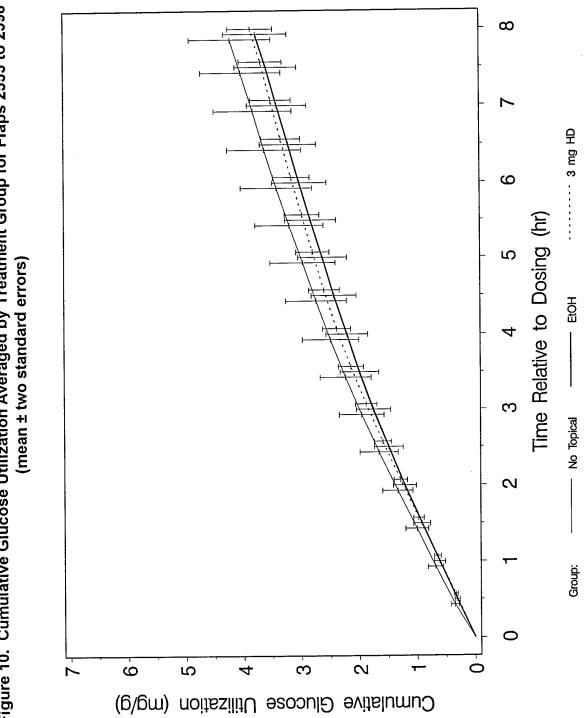
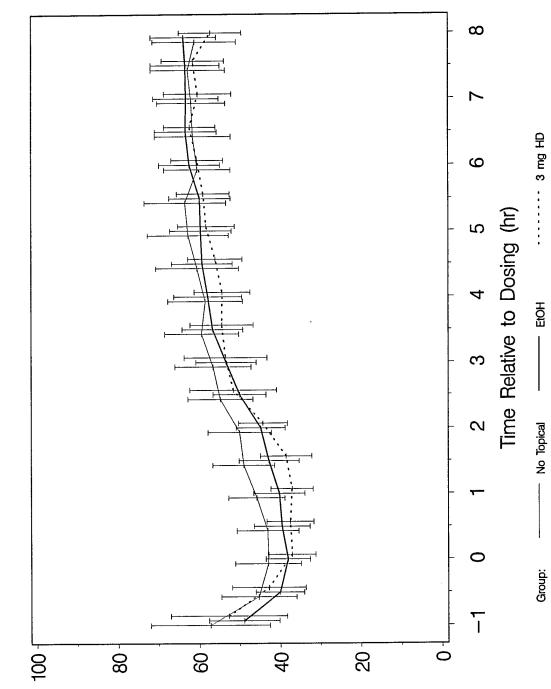


Figure 11. Vascular Resistance Averaged by Treatment Group for Flaps 2599 to 2640 (mean ± two standard errors)



Vascular Resistance (mmHg min/mL)

Figure 12. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2599 to 2640

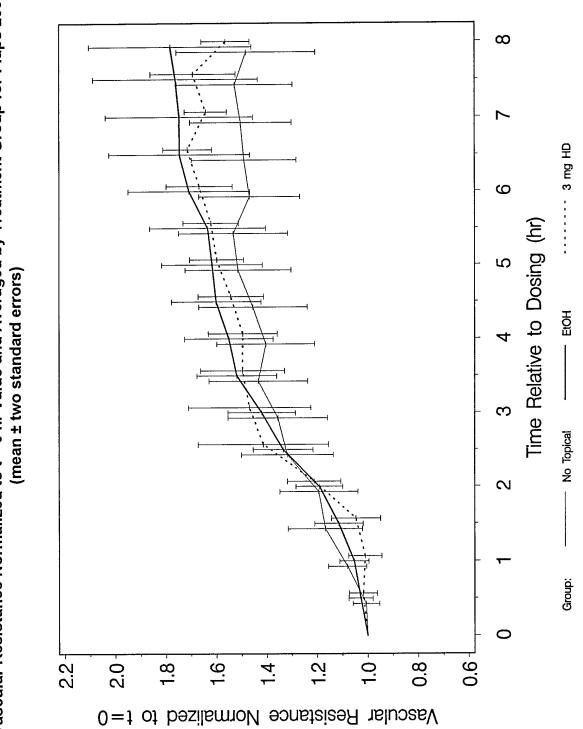


Figure 13. Glucose Utilization Averaged by Treatment Group for Flaps 2599 to 2640

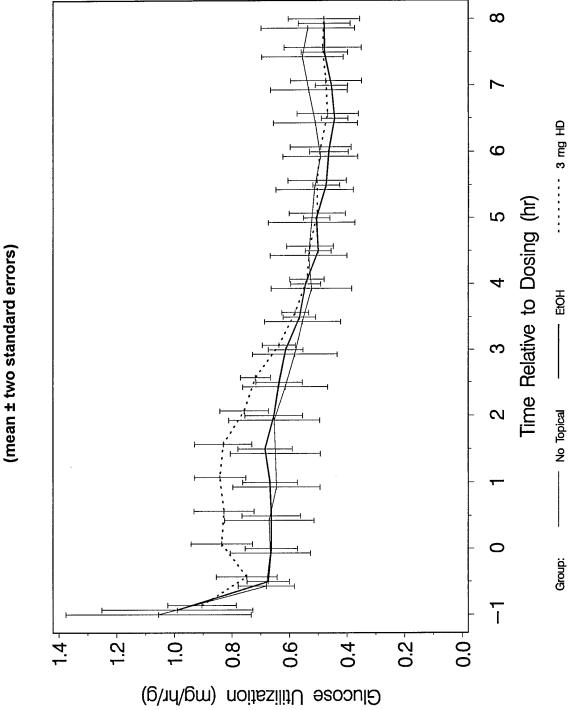
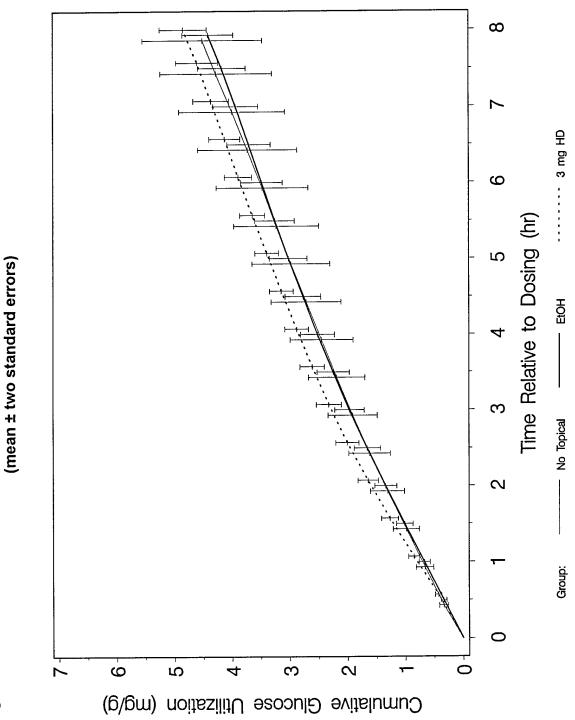


Figure 14. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2599 to 2640



APPENDIX C

**Summary Tables** 

Table 1. Standard Operating Procedures (SOPs) and Methods
Used in MREF Task 92-31

SOP No.	Method No.	Title
II-010		Standard Operating Procedure (SOP) For Application of Chemical Surety Materiel onto the Isolated Perfused Porcine Skin Flap
II-011		Standard Operating Procedure (SOP) For Cleaning the Isolated Perfused Porcine Skin Flap Apparatus
VII-023		Standard Operating Procedure (SOP) For the Surgical Preparation of the Isolated Perfused Porcine Skin Flap
	5/General	Method for pH Measurement Using the Fisher Accumet Model 955 Portable pH/mV Temperature Meter
	6/General	Method for Using the Hanna Instruments 8564 Thermohygrometer
	7/General	Method for Pumping Nutrient Media Through an Isolated Perfused Porcine Skin Flap with the Manostat Cassette® Pump
	8/General	Method for the Use of Matrx Quantiflex® VMC Small Animal Anesthesia Machine
	9/General	Method for the Use of the Propaq 106EL to Monitor Temperature and Invasive Pressure Within the Porcine Skin Flap Perfusion Chamber
	10/General	Method for the Preparation of Isolated Perfused Porcine Skin Flap (IPPSF) Media (2 Liters)
	11/General	Method for Operating and Maintaining the Isolated Perfused Porcine Skin Flap (IPPSF) Perfusion Chamber Heater Humidifier Unit
	13/General	Method for the Use of the Precision Systems Inc. μ- osmette <sup>™</sup> Model 5004 Automatic Osmometer
	32/In Vitro	Preparations for Performing an Experiment with an Isolated Perfused Porcine Skin Flap

Table 2. IPPSF Perfusion Media

Component	Amount Added	Units
Cell culture water	2.00	L
NaCl	13.78	g
KCI	0.71	g
CaCl <sub>2</sub>	0.56	g
KH₂PO₄	0.32	g
MgSO <sub>4</sub> -7H <sub>2</sub> O	. 0.58	g
NaHCO <sub>3</sub>	5.5	g
Dextrose	2.4	g
Bovine Serum Albumin, Fraction V	90	g
Amikacin SO₄	0.0625	g
The above mixture was adjusted to pH 7.4 HCl, filtered through glass wool, and sto approximately -20 C. After thawing and make a 2400-mL batch, the following co	red in 400-m I mixing enou	L aliquots at gh media to
Na Heparin	12,000	USP units
Penicillin G Sodium	30,000	USP units
The media pH was adjusted to 7.35 with	0.5 N NaOH	or 0.5 N HCl.

Table 3. List of IPPSFs Produced Under Task 92-31

q	Route of	Administration
ent Dose	Volume	(hr)
Challenge Agent Dosed	Conc.	(mg/mL)
Cha		Material Vehicle
		Material
Stage 1	Surgery	Date
Animal Side	of Flap	Origin
	Animal	Number
	Animal	Supplier
	lap	mber

																				_
•	•	ı	ı	topical	topical	•	•	1	1	í	1	ı	ı	ı	•	ı	1			1
	1	•	•	ı	•		•	4			ı	•	•	•	ı	1	•			1
	,	,	,		•	•		ı			•	•	,	ı	ı	•				•
1	1	ı	ı	Ethanol	Ethanol	ı	1	1	1	1	ı	ı	ī		ı	ı	•			•
none			none																	
1/30/95	1/30/95	1/31/95	1/31/95	2/6/95	2/6/95	2/7/95	2/7/95	2/13/95	2/13/95	2/14/95	2/14/95	2/20/95	2/20/95	2/21/95	2/21/95	2/27/95	2/27/95	3/1/95	3/13/95	3/14/95
œ	_	ፎ	_	叱	_	œ	_	ድ	_	ፎ	_	œ	_	œ	_	œ				œ
95-263-3	95-263-3	95-18-3	95-18-3	95-263-4	95-263-4	95-258-1	95-258-1	95-21-2	95-21-2	95-22-1	95-22-1	95-21-3	95-21-3	95-22-2	95-22-2	95-24-4	95-24-4	95-24-3	95-24-5	95-24-1
Shady Side																				
2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

J	Route of Administration	1	topical	topical	topical	topical	topical	ı	topical	topical	topical	topical	topical	topical	i	topical	topical	topical		topical	topical	topical	topical	topical
ent Dose	Volume (µL)	ı	300	300	300	300	300	•	300	300	300	300	300	300	•	300	300	300		300	300	300	300	300
Challenge Agent Dosed	Conc. (mg/mL)	1	10	9	9	1	10	F	9		•		•	10	•	20	20	ı		1	20	20	20	20
Cha	Material Vehicle	ı	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol	ı	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol	•	Ethanol	Ethanol	Ethanol		Ethanol	Ethanol	Ethanol	Ethanol	Ethanol
	Material	none	皇	오	皇	none	욷	none	오	none	none	none	none	웊	none	웊	웃	none			오	욷	모	모
Stage 1	Surgery Date	3/14/95	3/20/95	3/20/95	3/21/95	3/21/95	3/27/95	3/27/95	3/28/95	3/29/95	4/4/95	4/4/95	4/5/95	4/5/95	4/11/95	4/11/95	4/12/95	4/12/95	4/18/95	4/18/95	4/19/95	4/19/95	4/25/95	4/25/95
Animal Side	of Flap Origin	_	œ		œ	_	깥	_	œ	_	œ		œ		œ	ب	깥	_	œ	_	œ		œ	_
	Animal Number	95-24-1	95-201-11	95-201-11	95-202-7	95-202-7	95-206-6	95-206-6	95-205-6	95-205-6	95-22-4	95-22-4	95-207-6	95-207-6	95-1-4	95-1-4	95-205-7	95-205-7	95-208-5	95-208-5	95-212-7	95-212-7	95-214-11	95-214-11
	Animal Supplier	Shady Side																						
	Flap Number	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

			Animal Side	Stage 1	Ch	Challenge Agent Dosed	ent Dose	D
Flap	Animal	Animal	of Flap	Surgery		Conc.	Conc. Volume	Route of
Number	Supplier	Number	Origin	Date	Material Vehicle	(mg/mL)	(nL)	Administration

topical	. •	topical	. 1	topical	•	-	ı	topical	. '	ı	1	1	1	ı	ı	ı	1	ı		ı	topical
300	•	300	ı	300			,	300		•	•	1	,	1	1	1	ı			ı	300
ı	1	ı	ı	ı			•	,	ı	1	•	,		ı	ı	1		•		ı	,
Ethanol	1	Ethanol	ı	Ethanol			ı	Ethanol	í	ı	ı	Ī	į	Î	i	ı	ı	i		ı	Ethanol
1	none	•	none	ı			none	ı	1	•	1	•	1	ı	ı	ı	ı	ı		•	1
4/26/95	5/2/95	5/2/95	5/3/95	5/3/95	2/6/5	26/6/5	5/10/95	5/10/95	8/29/95	8/29/95	8/30/95	8/30/95	9/6/95	9/6/95	9/14/95	9/14/95	9/19/95	9/19/95	9/20/95	9/20/95	9/26/95
_	œ	ب	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	٦	œ
95-209-4	95-223-9	95-223-9	95-221-5	95-221-5	95-220-7	95-220-7	95-225-6	95-225-6	95-65-11	95-65-11	95-65-10	95-65-10	95-65-9	95-65-9	95-64-5	95-64-5	95-3-16	95-3-16	95-3-12	95-3-12	95-11-6
Shady Side	Shady Side	Shady Side	Shady Side	Shady Side	Shady Side	Shady Side	Shady Side	Shady Side	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics	Isler Genetics
2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567
	Shady Side 95-209-4 L 4/26/95 - Ethanol - 300	Shady Side 95-209-4 L 4/26/95 - Ethanol - 300 Shady Side 95-223-9 R 5/2/95 none	Shady Side 95-209-4 L 4/26/95 - Ethanol - 300 Shady Side 95-223-9 R 5/2/95 none 300 Shady Side 95-223-9 L 5/2/95 - Ethanol - 300	Shady Side       95-209-4       L       4/26/95       -       Ethanol       -       300         Shady Side       95-223-9       R       5/2/95       -       Ethanol       -       -       300         Shady Side       95-221-5       R       5/3/95       none       -       -       -       -	Shady Side       95-209-4       L       4/26/95       -       Ethanol       -       300         Shady Side       95-223-9       L       5/2/95       -       Ethanol       -       -         Shady Side       95-221-5       R       5/3/95       none       -       -       -         Shady Side       95-221-5       L       5/3/95       -       Ethanol       -       -	Shady Side       95-209-4       L       4/26/95       -       Ethanol       -       300         Shady Side       95-223-9       L       5/2/95       -       Ethanol       -       -         Shady Side       95-221-5       R       5/3/95       -       Ethanol       -       -         Shady Side       95-221-5       L       5/3/95       -       Ethanol       -       -         Shady Side       95-220-7       R       5/9/95       -       Ethanol       -       -	Shady Side       95-209-4       L       4/26/95       -       Ethanol       -       300         Shady Side       95-223-9       L       5/2/95       -       Ethanol       -       -         Shady Side       95-221-5       R       5/3/95       -       Ethanol       -       -         Shady Side       95-221-5       L       5/3/95       -       Ethanol       -       -         Shady Side       95-220-7       R       5/9/95       -       Ethanol       -       300         Shady Side       95-220-7       L       5/9/95       -       Ethanol       -       -	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         300           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         -         -         -           Shady Side         95-226-7         R         5/10/95         none         -         -         -	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -	Shady Side       95-209-4       L       4/26/95       -       Ethanol       - <t< td=""><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -</td><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/9/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-11&lt;</td><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         300           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-1</td><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         200           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10</td><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         300           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10<td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         none         -         -         -           Shady Side         95-22-6         R         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10</td><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-25-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         L         8/29/95         -         -         -         -           Isler Genetics         95-65-10         L         8/30/95         -         -         -         -           Isler Genetics         95-65-9</td></td></t<> <td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/9/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/30/95         -         -         -         -           Isler Genetics         95-65-9&lt;</td> <td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         R         8/29/95         -         -         -         -           Isler Genetics         95-65-9<!--</td--><td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-65-10         L         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         L         8/30/95         -         Ethanol         -         -         -           Isler Genetics<!--</td--><td>Shady Side         95-209-4         L         4726/95         -         Ethanol         -</td></td></td>	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/9/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-11<	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         300           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-1	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         200           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         L         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         300           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         -         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10 <td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         none         -         -         -           Shady Side         95-22-6         R         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10</td> <td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-25-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         L         8/29/95         -         -         -         -           Isler Genetics         95-65-10         L         8/30/95         -         -         -         -           Isler Genetics         95-65-9</td>	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         none         -         -         -           Shady Side         95-22-6         R         5/10/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         R         8/30/95         -         -         -         -           Isler Genetics         95-65-10	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-25-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         L         8/29/95         -         -         -         -           Isler Genetics         95-65-10         L         8/30/95         -         -         -         -           Isler Genetics         95-65-9	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/9/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/9/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-11         R         8/30/95         -         -         -         -           Isler Genetics         95-65-9<	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/3/95         -         Ethanol         -         -           Shady Side         95-225-6         R         5/10/95         -         Ethanol         -         -           Shady Side         95-65-11         R         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         R         8/29/95         -         -         -         -           Isler Genetics         95-65-9 </td <td>Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-65-10         L         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         L         8/30/95         -         Ethanol         -         -         -           Isler Genetics<!--</td--><td>Shady Side         95-209-4         L         4726/95         -         Ethanol         -</td></td>	Shady Side         95-209-4         L         4/26/95         -         Ethanol         -         -           Shady Side         95-223-9         L         5/2/95         -         Ethanol         -         -           Shady Side         95-221-5         R         5/3/95         -         Ethanol         -         -           Shady Side         95-221-5         L         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         R         5/3/95         -         Ethanol         -         -           Shady Side         95-220-7         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-22-6         L         5/10/95         -         Ethanol         -         -           Shady Side         95-65-10         L         8/29/95         -         Ethanol         -         -           Isler Genetics         95-65-10         L         8/30/95         -         Ethanol         -         -         -           Isler Genetics </td <td>Shady Side         95-209-4         L         4726/95         -         Ethanol         -</td>	Shady Side         95-209-4         L         4726/95         -         Ethanol         -

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

		_
q	Route of	Administration
ent Dose	Volume	(hr)
Challenge Agent Dosed	Conc.	(mg/ml_)
Cha		Material Vehicle (
		Material
Stage 1	Surgery	Date
Animal Side	of Flap	Origin
	Animal	Number
	Animal	Supplier
	Flap	Number

							-															—
- 100	topical																					
٠ .	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
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1 4	Ethanol																					
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9/26/95	9/2//95	9/27/95	10/3/95	10/3/95	10/10/95	10/10/95	10/11/95	10/11/95	10/17/95	10/17/95	10/18/95	10/18/95	10/24/95	10/24/95	10/25/95	10/25/95	10/31/95	10/31/95	11/1/95	11/1/95	11/7/95	11/7/95
	¥	_	ድ	_	œ	_	œ		œ	_	œ	ب	œ	ب	œ	٦	œ	لــ	œ	_	œ	
95-11-6	7-9-56	95-6-7	95-15-4	95-15-4	95-19-11	95-19-11	95-19-13	95-19-13	95-19-12	95-19-12	95-21-5	95-21-5	95-22-5	95-22-5	95-23-4	95-23-4	95-23-5	95-23-5	95-23-7	95-23-7	95-26-11	95-26-11
Isler Genetics	Ister Genetics	Isler Genetics																				
2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

|                         | ]   |   |   |   |   |   |   |  |   
   
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|-------------------------|---|---|---|---|---|---|---|--
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Route of Administration		topical	topical	topical	topical
   
   | topical  | topical  
  | ı  
  | topical  
   | I  | topical   | topical   | ı   | ı   | topical  
  | •  | topical  | 1   | topical   | topical   |
| Volume (µL)             |   | 300   | 300   | 300   | 300   | 300   | 1   | •  | 300   
   
   | •  | 300  
  | •  
  | 300  
   | 1  | 300   | 300   | t   | •   | 300  
  | ı  | 300  | •   | 300   | 300   |
| Conc.<br>(ma/mL)        |   | 10  | ı   | 10  | 1   | •   | •   | 1  | 1   
   
   | 1  | •  
  | •  
  | •  
   | •  | •   | •   | •   | 1   |  
  | ı  |  | •   | ı   | ı   |
| Vehicle                 |   | Ethanol   | Ethanol   | Ethanol   | Ethanol   | Ethanol   | 1   | •  | Ethanol   
   
   |  | Ethanol  
  | 1  
  | Ethanol  
   | 1  | Ethanol   | Ethanol   | 1   | •   | Ethanol  
  | •  | Ethanol  | •   | Ethanol   | Ethanol   |
| Material                |   | 오   | 1   | 모   | 1   | ı   | 1   | 1  | 1   
   
   | •  | ı  
  | •  
  | ı  
   | ,  | ı   | •   | •   | •   | 1  
  | 1  | 1  |   | 1   | ı   |
| Surgery<br>Date         |   | 11/8/95   | 11/8/95   | 11/14/95  | 11/14/95  | 11/15/95  | 11/15/95  | 11/21/95   | 11/21/95  
   
   | 11/28/95   | 11/28/95   
  | 11/29/95   
  | 11/29/95   
   | 12/5/95  | 12/5/95   | 12/6/95   | 12/6/95   | 12/12/95  | 12/12/95   
  | 12/13/95   | 12/13/95   | 1/10/96   | 1/10/96   | 1/16/96   |
| of Flap<br>Origin       |   | œ   | _   | œ   | _   | œ   | _   | œ  | _   
   
   | œ  | ب  
  | œ  
  | _  
   | œ  | _   | œ   | _   | œ   | _  
  | œ  | _  | œ   | _   | ď   |
| Animal<br>Number        |   | 95-26-10  | 95-26-10  | 95-108-4  | 95-108-4  | 95-108-6  | 95-108-6  | 95-36-9  | 95-36-9   
   
   | 95-34-12   | 95-34-12   
  | 95-34-9  
  | 95-34-9  
   | 95-39-15   | 95-39-15  | 95-39-13  | 95-39-13  | 95-39-14  | 95-39-14   
  | 95-35-5  | 95-35-5  | 96-45-6   | 96-45-6   | 96-45-7   |
| Animal<br>Supplier      |   | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics   | Isler Genetics  
   
   | Isler Genetics   | Isler Genetics   
  | Isler Genetics   
  | Isler Genetics   
   | Isler Genetics   | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics  | Isler Genetics   
  | Isler Genetics   | Isler Genetics   | Isler Genetics  | Isler Genetics  | Isler Genetics  |
| Flap<br>Number          |   | 2591  | 2592  | 2593  | 2594  | 2595  | 2596  | 2597   | 2598  
   
   | 2599   | 2600   
  | 2601   
  | 2602   
   | 2603   | 2604  | 2605  | 2606  | 2607  | 2608   
  | 2609   | 2610   | 2611  | 2612  | 2613  |
|                         | Animal Animal of Flap Surgery Supplier Number Origin Date Material Vehicle (mg/mL) (uL) | Animal Animal of Flap Surgery<br>er Supplier Number Origin Date Material Vehicle (mg/mL) (µL) Adı | Animal Animal of Flap Surgery Supplier Number Origin Date Material Vehicle (mg/mL) (µL) Isler Genetics 95-26-10 R 11/8/95 HD Ethanol 10 300 | Animal Animal of Flap Surgery Supplier Number Origin Date Material Vehicle (mg/mL) (µL) Isler Genetics 95-26-10 R 11/8/95 - Ethanol - 300 | Animal Animal of Flap Surgery Supplier Number Origin Date Material Vehicle (mg/mL) (µL)  Isler Genetics 95-26-10 R 11/8/95 HD Ethanol 10 300  Isler Genetics 95-26-10 L 11/8/95 - Ethanol - 300  Isler Genetics 95-108-4 R 11/14/95 HD Ethanol 10 300 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         HD         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         HD         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         +D         Ethanol         10         300           Isler Genetics         95-108-4         R         11/14/95         +D         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         HD         Ethanol         -         330           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         330           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         330           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         330           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         330           Isler Genetics         95-108-6         L         11/15/95         -         -         -         -         - | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         HD         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         -         -         -           Isler Genetics         95-108-6         L         11/15/95         -         -         -         -           Isler Genetics         95-108-6         L         11/15/95         -         -         -         -           Isler Genetics         95-108-7 <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R<!--</td--><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         -         -         -           Isler Genetics         95-3</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/15/95         -         -         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -           Isler Genetics         95-34-12<td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-9         R         11/28/95         -         -         -         -        
-</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         R         11/24/95         -         Ethanol         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/21/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/29/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/28/95         -         Ethanol         -         -           Isler Gene</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Gene</td><td>Animal         Animal Surgery         Surgery         Conc. Volume           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-30-9         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/12/95</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-28-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L   
     11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         L         11/12/95         -         Ethanol         -         -           Isler Genet</td><td>Animal         Animal of Flap         Surgery         Conc. Material Vehicle (mg/mL) (µL)           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-30-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/2</td></td></td> | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-36 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R </td <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         -         -         -           Isler Genetics         95-3</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/15/95         -         -         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -           Isler Genetics         95-34-12<td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-9         R         11/28/95         -         -         -         -         -</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         R         11/24/95         -         Ethanol         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/21/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/29/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300          
Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/28/95         -         Ethanol         -         -           Isler Gene</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Gene</td><td>Animal         Animal Surgery         Surgery         Conc. Volume           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-30-9         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/12/95</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td><td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-28-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         L         11/12/95         -         Ethanol         -         -           Isler Genet</td><td>Animal         Animal of Flap         Surgery         Conc. Material Vehicle (mg/mL) (µL)           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-30-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/2</td></td> | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         -         -         -           Isler Genetics         95-36-9
        L         11/12/95         -         -         -         -           Isler Genetics         95-3 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/15/95         -         -         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         L         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -           Isler Genetics         95-34-12 <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-9         R         11/28/95         -         -         -         -         -</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         R         11/24/95         -         Ethanol         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/21/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/29/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/28/95         -         Ethanol         -         -           Isler Gene</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Gene</td> <td>Animal         Animal Surgery         Surgery         Conc. Volume           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics    
    95-30-9         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/12/95</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics</td> <td>Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-28-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         L         11/12/95         -         Ethanol         -         -           Isler Genet</td> <td>Animal         Animal of Flap         Surgery         Conc. Material Vehicle (mg/mL) (µL)           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-30-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/2</td> | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-9         R         11/28/95         -         -         -         -         - | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         -         -         -           Isler Genetics         95-36-9         R         11/24/95         -         Ethanol         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         -           Isler Genetics         95-34-12         R         11/28/95         -         -         -         -         - | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/21/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/21/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/29/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         -         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/15/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/29/95         -         Ethanol         -         -           Isler Genetics | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R    
    11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/28/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/28/95         -         Ethanol         -         -           Isler Gene | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Gene | Animal         Animal Surgery         Surgery         Conc. Volume           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (μL)           Isler Genetics         95-26-10         L         11/8/95         -         Ethanol         -         300           Isler Genetics         95-26-10         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         L         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/14/95         -         Ethanol         -         -           Isler Genetics         95-30-9         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/12/95 | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-36-9         R         11/15/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/12/95         -         Ethanol         -         -           Isler Genetics | Animal         Animal         of Flap         Surgery         Conc.         Volume           Supplier         Number         Origin         Date         Material         Vehicle         (mg/mL)         (µL)           Isler Genetics         95-28-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/15/95         -         Ethanol         -         -           Isler Genetics         95-36-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-12         L         11/12/95         -         Ethanol         -         -           Isler Genet | Animal         Animal of Flap         Surgery         Conc. Material Vehicle (mg/mL) (µL)           Supplier         Number         Origin         Date         Material Vehicle (mg/mL) (µL)           Isler Genetics         95-26-10         R         11/8/95         -         Ethanol         -         300           Isler Genetics         95-108-4         R         11/14/95         -         Ethanol         -         300           Isler Genetics         95-108-6         R         11/14/95         -         Ethanol         -         -           Isler Genetics         95-108-6         R         11/12/95         -         Ethanol         -         -           Isler Genetics         95-30-9         L         11/12/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         R         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-9         L         11/2/95         -         Ethanol         -         -           Isler Genetics         95-34-1         R         11/2 |

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

		-																							
Q	Route of Administration		ı	ı	topical	ı	topical	topical		ı	topical	ı	topical	ı	topical	topical	topical	topical	topical						
ent Dose	Volume (µL)		1	ı	300	•	300	300	r	,	300	•	300	300	300	300	300	300	300	1	300	300	300	300	300
Challenge Agent Dosed	Conc. (mg/mL)		•	ı	1	1	1	ı	•	1	•	ı	ı	ı	10	9	1	9	•	•	10	10	1	1	10
Cha	Material Vehicle	1		ı	Ethanol	1	Ethanol	Ethanol	ı	1	Ethanol	•	Ethanol	1	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol						
	Material			ı		•			•	•			1	•	모	오	•	呈	ı	•	모	오	ı	•	오
Stage 1	Surgery Date		1/16/96	1/17/96	1/17/96	1/23/96	1/23/96	1/24/96	1/24/96	1/30/96	1/30/96	1/31/96	1/31/96	2/6/96	2/6/96	2/7/96	2/1/96	2/13/96	2/13/96	2/14/96	2/14/96	2/20/96	2/20/96	2/21/96	2/21/96
Animal Side	of Flap Origin		_	œ	_	œ	_	œ	_	œ	ب	œ		œ		œ	_	œ	_	œ	ب	œ	_	œ	_
	Animal Number		96-45-7	96-47-7	96-47-7	96-50-10	96-50-10	96-49-12	96-49-12	96-46-8	96-46-8	96-51-5	96-51-5	96-128-5	96-128-5	96-128-4	96-128-4	96-56-5	96-56-5	96-56-4	96-56-4	96-66-11	96-66-11	96-67-5	96-67-5
	Animal Supplier		Isler Genetics																						
	Flap Number		2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

			_	
•	٥	Route of	Administration	
(	ent Dose	Volume	(hL)	
•	Challenge Agent Dosed	Conc.	(mg/mL)	
ō	Cha		Vehicle	
			Material Vehicle	
	Stage 1	Surgery	Date	
Animal	Side	of Flap	Origin	
		Animal	Number	
		Animal	Supplier	
		Flap	Number	

topical	topical	topical	fooical
300	300	300	300
10	10	9	10
Ethanol	Ethanol	Ethanol	Ethanol
오	오	모	HD
3/2/86	3/2/96	3/6/96	3/6/96
œ	_	œ	
96-69-11	96-69-11	96-69-10	96-69-10
Isler Genetics	Isler Genetics	Isler Genetics	Isler Genefics
2637	2638	2639	2640

Table 4. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2501 - 2554 Shady Side Swine; Media Made with Sigma BSA

					Time After Dosing (hr)	r)	
Endpoint	Treatment Group	z	0 Mean (S.D.)	1 Mean (S.D.)	2 Mean (S.D.)	4 Mean (S.D.)	8 Mean (S.D.)
Vascular Resistance (mmHg•min/mL)	Untreated	5	52.0 (22.6)	48.6 (22.5)	52.4 (17.7)	50.8 (24.2)	57.1 (29.4)
	EtOH	8	44.5 (10.1)	43.9 (8.6)	48.0 (12.3)	55.8 (17.6)	54.2 (14.3)
	3 mg HD	4	49.0 (16.6)	43.7 (11.0)	48.6 (16.4)	58.5 (16.6)	53.2 (15.4)
	15 mg HD	5	45.2 (15.3)	44.5 (15.8)	53.2 (31.8)	57.9 (39.9)	46.4 (21.4)
Vascular Resistance Normalized to t=0	Untreated	5	1.00 ( -)	0.94 (0.12)	1.08 (0.43)	0.98 (0.19)	1.14 (0.18)
	EtOH	80	1.00 ( -)	1.00 (0.11)	1.09 (0.17)	1.26 (0.30)	1.23 (0.24)
	3 mg HD	4	1.00 ( -)	0.92 (0.18)	1.00 (0.09)	1.25 (0.41)	1.14 (0.40)
	15 mg HD	5	1.00 ( -)	0.98 (0.06)	1.13 (0.27)	1.20 (0.38)	1.03 (0.24)
Glucose Utilization (mg/hr/g)	Untreated	5	0.88 (0.22)	1.00 (0.18)	0.73 (0.16)	0.69 (0.27)	0.24 (0.24)
	EtOH	8	0.87 (0.15)	0.95 (0.19)	0.91 (0.14)	0.69 (0.18)	0.41 (0.12)
	3 mg HD	4	0.88 (0.26)	0.90 (0.26)	0.92 (0.14)	0.65 (0.15)	0.33 (0.13)
	15 mg HD	5	0.65 (0.25)	0.64 (0.31)	0.634, b (0.26)	0.49 (0.27)	0.39 (0.21)
Cumulative Glucose Utilization (mg/g)	Untreated	5	0.00 ( - )	0.99 (0.17)	1.78 (0.12)	3.31 (0.47)	4.36 (1.25)
	EtoH	ω	0.00 (-)	0.96 (0.19)	1.89 (0.34)	3.43 (0.55)	5.40 (0.92)
	3 mg HD	4	0.00 ( -)	0.92 (0.24)	1.85 (0.39)	3.36 (0.59)	5.25 (1.22)
	15 mg HD	2	0.00 (-)	0.69 (0.32)	1.31 (0.58)	2.42 (1.14)	4.05 (1.89)

 $^{\circ}$  Mean is significantly less than that observed for the EtOH group (p < 0.05).  $^{\circ}$  Mean is significantly less than that observed for the 3 mg HD group (p < 0.05).

Table 5. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2555 - 2598 Isler Genetics Swine; Media Made with Sigma BSA

	-			Ë	Time After Dosing (hr)	ır)	
Endpoint	Treatment Group	z	0 Mean (S.D.)	1 Mean (S.D.)	2 Mean (S.D.)	4 Mean (S.D.)	8 Mean (S.D.)
Vascular Resistance (mmHg∙min/mL)	Untreated	12	39.1 (9.7)	40.1 ( 9.3)	42.0 (11.3)	47.8 (15.7)	50.6 (20.2)
	EtOH	1	47.0 (24.2)	40.7 (13.7)	39.6 (7.0)	43.7 (8.9)	46.6 (16.2)
	3 mg HD	16	36.7 (13.2)	34.5 (13.3)	35.2 (11.7)	43.1 (11.7)	42.6 (14.5)
Vascular Resistance Normalized to t=0	Untreated	12	1.00 (-)	1.03 (0.08)	1.08 (0.19)	1.27 (0.44)	1.35 (0.54)
	EtoH	11	1.00 ( -)	0.90° (0.10)	0.92° (0.19)	1.02 (0.25)	1.10 (0.41)
	3 mg HD	16	1.00 ( -)	0.94° (0.08)	0.97 (0.09)	1.24 (0.40)	1.23 (0.56)
Glucose Utilization (mg/hr/g)	Untreated	12	0.70 (0.23)	0.67 (0.24)	0.67 (0.23)	0.51 (0.18)	0.40 (0.08)
	EtoH	1,	0.60 (0.13)	0.61 (0.16)	0.59 (0.17)	0.43 (0.14)	0.36 (0.11)
	3 mg HD	16	0.57 (0.19)	0.63 (0.11)	0.62 (0.14)	0.49 (0.15)	0.35 (0.09)
Cumulative Glucose Utilization (mg/g)	Untreated	12	0.00 ( -)	0.68 (0.23)	1.33 (0.45)	2.48 (0.85)	4.21 (1.23)
	EtOH	=	0.00 (-)	0.61 (0.15)	1.21 (0.33)	2.20 (0.60)	3.77 (0.92)
	3 mg HD	16	0.00 (-)	0.64 (0.11)	1.28 (0.23)	2.38 (0.49)	3.86 (0.78)

<sup>e</sup> Mean is significantly less than that observed for the untreated group (p < 0.05).

Table 6. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2599 - 2640 Isler Genetics Swine; Media Made with Mallinckrodt BSA

				F	Time After Dosing (hr)	r)	
Endpoint	Treatment Group	z	0 Mean (S.D.)	1 Mean (S.D.)	2 Mean (S.D.)	4 Mean (S.D.)	8 Mean (S.D.)
Vascular Resistance (mmHg•min/mL)	Untreated	17	43.0 (13.5)	45.8 (11.6)	50.0 (13.0)	58.5 (15.4)	61.2 (15.5)
	EtOH	17	38.1 (11.3)	40.2 (13.0)	44.8 (12.4)	57.9 (17.3)	63.9 (16.7)
	3 mg HD	10	37.0 (9.2)	37.1 (8.3)	44.3 ( 9.5)	54.3 (10.9)	57.3 (12.2)
Vascular Resistance Normalized to t=0	Untreated	11	1.00 ( -)	1.08 (0.13)	1.19 (0.26)	1.40 (0.32)	1.48 (0.41)
	EtOH	17	1.00 ( -)	1.05 (0.12)	1.19 (0.19)	1.55 (0.36)	1.78 (0.66)
	3 mg HD	10	1.00 ( -)	1.01 (0.10)	1.21 (0.17)	1.50 (0.22)	1.56 (0.15)
Glucose Utilization (mg/hr/g)	Untreated	7	0.67 (0.23)	0.65 (0.25)	0.65 (0.26)	0.52 (0.23)	0.54 (0.26)
	EtOH	17	0.66 (0.19)	0.67 (0.20)	0.65 (0.21)	0.54 (0.11)	0.48 (0.19)
	3 mg HD	10	0.84 (0.17)	0.84 (0.14)	0.76 (0.13)	0.54 (0.10)	0.48 (0.20)
Cumulative Glucose Utilization (mg/g)	Untreated	11	0.00 (-)	0.66 (0.25)	1.31 (0.49)	2.45 (0.91)	4.51 (1.72)
	ЕтОН	17	0.00 (-)	0.67 (0.20)	1.34 (0.39)	2.52 (0.61)	4.41 (0.91)
	3 mg HD	10	0.00 (-)	0.85 (0.16)	1.64 (0.28)	2.88 (0.33)	4.85 (0.65)

Table 7. Incidence Rates of Histopathologic Endpoints for Flaps Perfused with Media Made with Bovine Serum Albumin from Two Sources

Tissue Type	Treatment	Epidermal- Dermal Separation	Intracellular Edema	Intercellar Edema	Dark Basal Cells	Sample Size
		Media Made w	Media Made with Sigma BSA			
Pig Skin at Stage 1 Surgery	None	0.00	00.0	00.0	00 0	22
Flap	Untreated	0.80	0.90	0.20	0.10	1 6
Flap	Ethanol, 300 µL	0.29	0.86	0.29	00.0	7
Flap	XHD, 3 mg	0.29	0.86	0.29	0.14	4
		Media Made with	Media Made with Mallinckrodt BSA			
Pig Skin at Stage 1						
Surgery	None	0.00	0.00	0.00	0.00	15
Flap	Untreated	0.58	0.67	0.08	0.08	12
Flap	Ethanol, 300 µL	0.61	0.83	0.17	0.33	18
Flap	XHD, 3 mg	0.71	0.75	0.13	0.50	•∞

'Epidermal-dermal separation was scored as a "?" for one specimen in this treatment group.

Table 8. Comparison of Incidence Rates of Histopathological Endpoints
Between Selected Pairs of Treatment Groups

Pair of Treatment Groups Compared	Source of BSA Used in Perfusion Media	Histopathological Endpoint	Incidence Rate, Group 1	Incidence Rate, Group 2	Fisher's Exact Test Comparing Groups (p-value)
Group 1: Stage 1-Sampled	Sigma	Epidermal-dermal Separation	0/22	8/10	<0.001
Normal Pig Skin		Intracellular Edema	0/22	9/10	<0.001
Group 2: Untreated Flaps		Intercellular Edema	0/22	2/10	0.091
Onlineated 1 taps		Dark Basal Cells	0/22	1/10	0.312
	Mallinckrodt	Epidermal-dermal Separation	0/15	7/12	<0.001
		Intracellular Edema	0/15	8/12	<0.001
		Intercellular Edema	0/15	1/12	0.444
		Dark Basal Cells	0/15	1/12	0.444
Group 1: Untreated Flaps	Sigma	Epidermal-dermal Separation	8/10	2/7	0.058
Group 2:		Intracellular Edema	9/10	6/7	1.000
Ethanol, 300 µL		Intercellular Edema	2/10	2/7	1.000
		Dark Basal Cells	1/10	0/7	1.000
	Mallinckrodt	Epidermal-dermal Separation	7/12	11/18	1.000
		Intracellular Edema	8/12	15/18	0.392
		Intercellular Edema	1/12	3/18	0.632
		Dark Basal Cells	1/12	6/18	0.193
Group 1: Ethanol, 300 μL	Sigma	Epidermal-dermal Separation	2/7	4/14	1.000
Group 2:		Intracellular Edema	6/7	12/14	1.000
HD, 3 mg		Intercellular Edema	2/7	4/14	1.000
		Dark Basal Cells	0/7	2/14	0.533
	Mallinckrodt	Epidermal-dermal Separation	11/18	5/7°	1.000
		Intracellular Edema	15/18	6/8	0.628
		Intercellular Edema	3/18	1/8	1.000
		Dark Basal Cells	6/18	4/8	0.664

Epidermal-dermal separation was scored as a "?" for one specimen in this treatment group.

Table 9. Comparison of Incidence Rates of Frank Blisters on Flaps from Three Sets of Experiments

Pair of Treatment	H S C C C	Source of Swine	Source of BSA Used in Perfusion Media	Incidence Rate, Group 1	Incidence Rate, Group 2	Fisher's Exact Test Comparing Groups (p-value)
Cloubs compared	ind day					/
Group 1:	2501 to 2554	Shady Side Farms	Sigma	9/2	6/0	1.000
Ollifeated Flaps	2555 to 2598	Isler Genetics	Sigma	0/14	2/12	0.203
Group 2: Ethanol, 300 µL	2599 to 2640	Isler Genetics	Mallinckrodt	5/14	7/18	1.000
Group 1:	2501 to 2554	Shady Side Farms	Sigma	6/0	0/4	1.000
Eulailoi, soo pr	2555 to 2598	Isler Genetics	Sigma	2/12	0/17	0.163
Group 2: HD, 3 mg	2599 to 2640	Isler Genetics	Mallinckrodt	7/18	3/10	0.703
Group 1:	2501 to 2554	Shady Side Farms	Sigma	6/0	9/2	1.000
Eulatiol, sou pr	2555 to 2598	Isler Genetics	Sigma	NA	NA	AN
Group 2: HD, 15 mg	2599 to 2640	Isler Genetics	Mallinckrodt	NA	NA	NA

NA = not available; 15 mg doses of HD were administered to the first set of flaps only.

Note: when blister rates were compared for the effect of the type of BSA used in the media, the incidence for Mallinckrodt BSA was significantly greater than for Sigma BSA in untreated flaps (5/14 versus 0/14, respectively, p = 0.041) and in 3 mg of HD-treated flaps (3/10 versus 0/17, respectively, p = 0.041), but not for ethanol-treated flaps (7/18 versus 2/12, respectively, p = 0.249).

APPENDIX D

NCSU-CPTC Report

## Report on Phase I and Phase II of Battelle IPPSF Perfusion

August 4, 1995

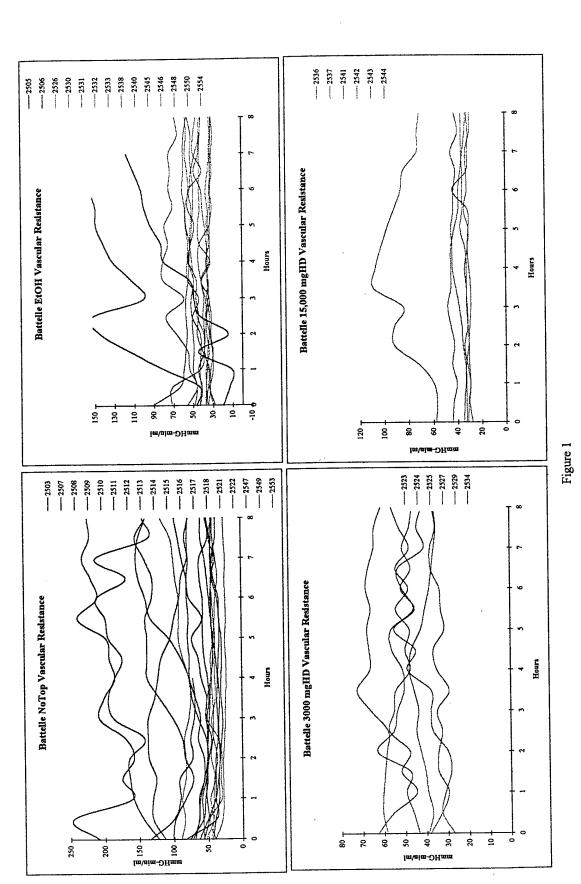
James D. Brooks M.S., Nancy A. Monteiro-Riviere Ph.D., Jim E. Riviere DVM, Ph.D.

Cutaneous Pharmacology and Toxicology Center College of Veterinary Medicine North Carolina State University Raleigh, NC 27606

## Report on Phase I and Phase II of Battelle IPPSF Perfusion

### **Selection Process:**

We eliminated IPPSF #'s 2501, 02 because there were no pressure readings. Figure 1 shows vascular resistance profiles for 44 Battelle IPPSFs. The plots in red are skin flaps run before March 14,1995, when Jim Brooks visited MREF, and those in green are after March 14, 1995. We selected only skin flaps run after this visit since several suggestions were made that would have influenced the "art" of IPPSF perfusion. We eliminated IPPSFs 2503 through 2518 on this basis--the importance of attaining a low pressure was not fully realized. About 25% (12 of 44) of the skin flaps were eliminated from analysis due to the presence of RBC's in the histology samples. We hypothesize that the RBC's are present due to incomplete perfusion of the skin flaps--possibly a result of using a more viscous flushing solution (i.e. Dulbecco's medium) or due to cannulation of a smaller artery. The IPPSFs that were eliminated due to RBC's are 2513, 14, 15, 17, 23, 26, 28, 29, 32, 37, 38, and 54. Table 1 lists the 22 Battelle IPPSFs that were selected for comparison against the CPTC IPPSFs. All CPTC skin flaps that fit the "normal" protocol were used for comparison--that is, 8 hour perfusion, 1 ml/min flow rate, 120 mg/dl glucose concentration. All treated groups and controls were then compared.



Battelle Vascular Resistance Before and After 3/14/95

BEFORE MARCH 14,1995

AFTER MARCH 14,1995

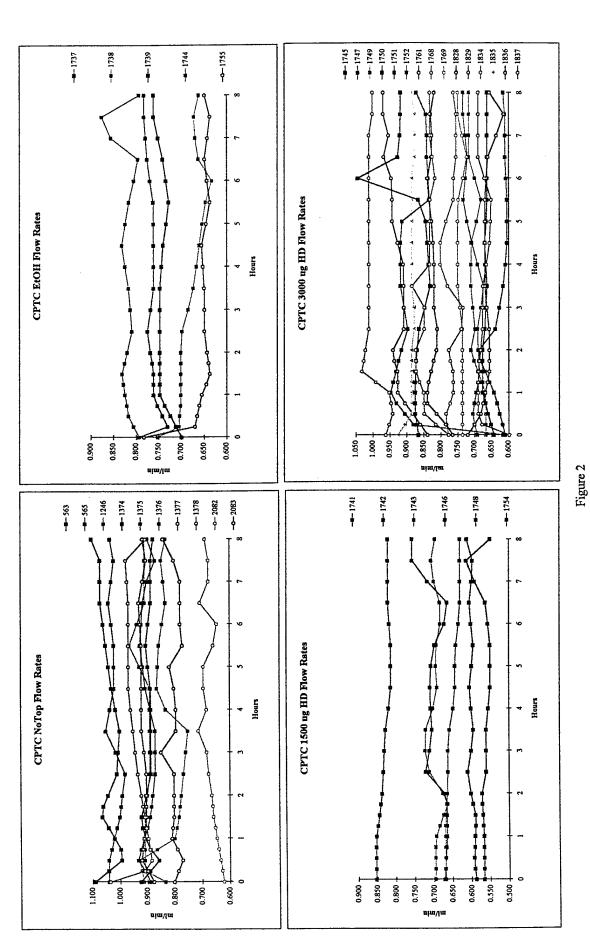
Table 1
Selection Process for Battelle IPPSF's

1	Date	IPPSF#	Dose	Selection
1	-Feb	2501	NoTop	No pressure readings
1	-Feb	2502	NoTop	No pressure readings
2	2-Feb	2503	NoTop	High pressure readings prior to 3/14/95
2	2-Feb	2504	aborted	Aborted-poor artery integrity
8	3-Feb	2505	EtOH	High pressure readings prior to 3/14/95
8	3-Feb	2506	EtOH	High pressure readings prior to 3/14/95
9	-Feb	2507	NoTop	High pressure readings prior to 3/14/95GU=0.
9	-Feb	2508	NoTop	High pressure readings prior to 3/14/95
1:	5-Feb	2509	NoTop	High pressure readings prior to 3/14/95
1:	5-Feb	2510	NoTop	High pressure readings prior to 3/14/95-pH=7.66 at 15 min
10	6-Feb	2511	NoTop	High pressure readings prior to 3/14/95
	6-Feb	2512	NoTop	Prior to 3/14/95
	2-Feb	2513	NoTop	RBC's seen in histology samples
	2-Feb	2514	NoTop	RBC's seen in histology samples-GU=0.
	3-Feb	2515	NoTop	RBC's seen in histology samples
	3-Feb	2516	NoTop	Prior to 3/14/95pH=7.18 at 15 min.
1	-Маг	2517	NoTop	RBC's seen in histology samples
1	-Mar	2518	NoTop	Prior to 3/14/95pH=7.21 at 3 hr.
7	-Mar	2519	aborted	Pig died
8	-Mar	2520	aborted	Pig died
16	6-Mar	2521	NoTop	SELECTED
10	6-Mar	2522	NoTop	SELECTED
22	2-Mar	2523	3000 ug HD	RBC's seen in histology samples
22	2-Mar	2524	3000 ug HD	SELECTED
23	3-Mar	2525	3000 ug HD	SELECTED
23	3-Mar	2526	EtOH	RBC's seen in histology samples
29	9-Mar	2527	3000 ug HD	SELECTED
29	9-Mar	2528	NoTop	Catheter came out-RBC's seen in histology samples
30	0-Mar	2529	3000 ug HD	RBC's seen in histology samples
30	0-Mar	2530	EtOH	SELECTED
5	5-Apr	2531	EtOH	SELECTED
	-Apr	2532	EtOH	RBC's seen in histology samples
	5-Apr	2533	EtOH	SELECTED
6	5-Apr	2534	3000 ug HD	SELECTED
	2-Apr	2535	NoTop	Perfusion stoppedlow glucose, high pressure
	2-Apr	2536	15000 ug HD	SELECTED
	3-Арг	2537	15000 ug HD	RBC's seen in histology samples
1:	3-Apr	2538	EtOH	RBC's seen in histology samples
	9-Apr	2539	NoTop	Perfusion stopped-low glucose, high pressure
	9-Apr	2540	EtOH	SELECTED
2	0-Apr	2541	15000 ug HD	SELECTED
	0-Apr	2542	15000 ug HD	SELECTED
	6-Apr	2543	15000 ug HD	SELECTED
	6-Apr	2544	15000 ug HD	SELECTED
	7-Apr	2545	EtOH	SELECTED
	7-Apr	2546	EtOH	SELECTED
	-May	2547	NoTop	SELECTED
3	-May	2548	EtOH	SELECTED
	-May	2549	NoTop	SELECTED
	-May	2550	EtOH	SELECTED
	0-May	2551	aborted	Abortedpoor artery integrity
	0-May	2552	aborted	Aborted-poor artery integrity
	-		3.7 m	COL DOCED
	l-May	2553	NoTop	SELECTED

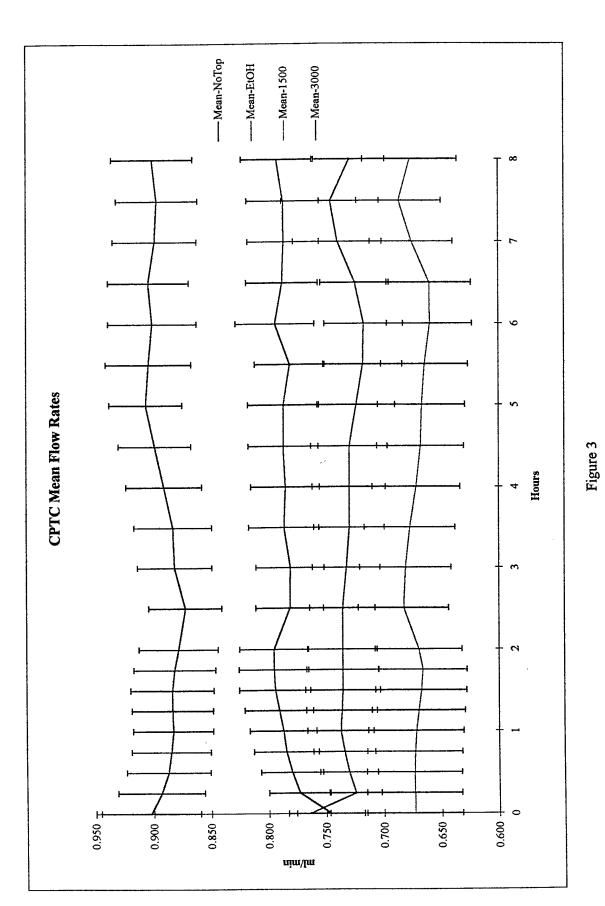
### Flow rates:

Figures 2 and 3 are CPTC flow rates for all treatments. Compare these to Figures 4 and 5 of the same data for Battelle. The primary impression is that independent of the magnitude of the flow rate, CPTC flow rates remain constant as evidenced by flatter and smoother flow profiles.

An analysis of variance (ANOVA) was performed on the Battelle vs CPTC flow rates. First we calculated the coefficient of variance (CV = SEM/Mean flow rate) for each of the 22 Battelle and 36 CPTC IPPSFs. Then we ran an analysis of this variance for each dose group and another for just Battelle vs CPTC. The mean CV for each Battelle dose group is higher than each CPTC dose group (P = 0.0779), although not significantly different. The comparison of the CV of all the Battelle flow rates to the CV of all the CPTC flow rates is significantly different (P = 0.0012). We performed the ANOVA with Microsoft Excel and with SAS (SAS Institute, Cary NC). The results were the same. Table 2 lists the results of the ANOVA performed by Microsoft Excel. Appendix A(1) is a printout of the ANOVA performed by SAS on the flow rate CVs. Three Battelle IPPSFs (2534, 2542, and 2543) assumed a constant flow rate, which resulted in a CV of zero. These were not used in the ANOVA for flow rate. Column two (T-Grouping) of the ANOVA section of Table 2 is the results of T-Test (LSD) grouping. Groups with like letters are from the same population, those with differing letters are from different populations (P = 0.05). Note that the mean flow rate from Battelle no-topical-dose controls is different from all mean flow rates for CPTC. Mean CVs from all Battelle flow rates are significantly higher compared to all the mean flow rate CVs from CPTC (P = 0.0012)



Tigue 2 CPTC Individual Flow Rates



CPTC Mean Flow Rates

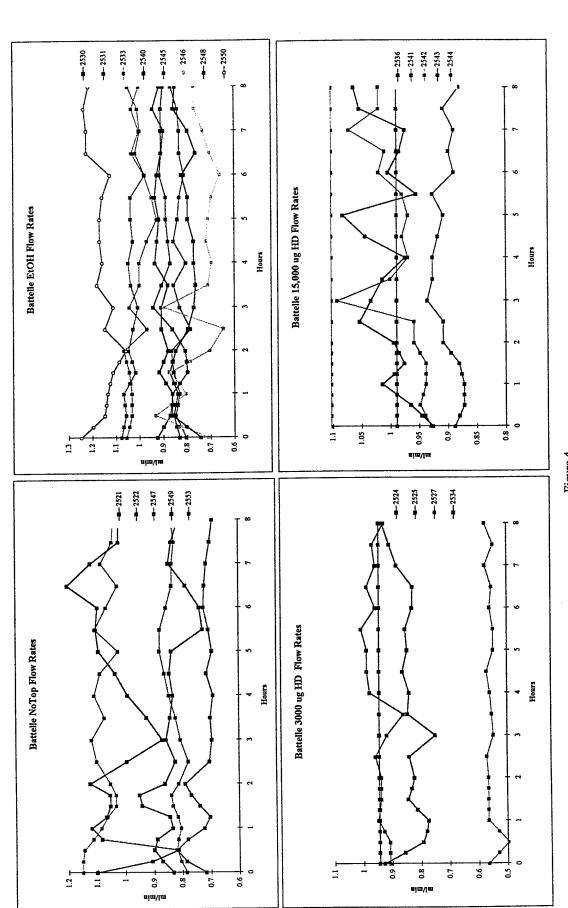
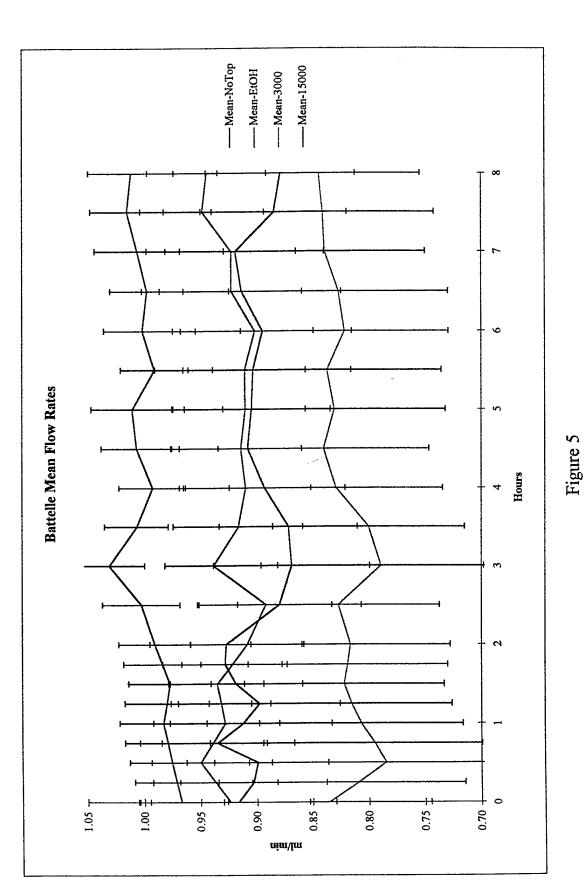


Figure 4 Battelle Individual Flow Rates

IPPSF 2534, 2542, and 2543 had estimated flow rates-problems with flowmeter calibration.



Battelle Mean Flow Rates

CPTC vs Battelle Flow Rate Coefficient of Variance

CPTC
Battelle

																																														_
	CofV	0.0065	0.0039	0.0137	0.0038	0.0048	0.0057	0.0029	0.0088	0.0084	0.0054	0.0064	0.0010	0.0040	0.0086	0.0044	0.0051	0.0102				0.0065	0.0012	0.0000	0.0061	0.0027	0.0176	0.0060	0.0068	0.0070	0.0023	0.0080	0.0062	2000	0.0020	0.0063	0 0068	0.0010	0.0025	0.0039	0.0045	0.0057	0.0094	0000	0.0052	·
?	DOSE	C-NoTop			C-ETOH	C-ETOH	C-ETOH	C-ETOH	C-ETOH					03000	C3000		300	3000			C1500	C1500	C1500	C1500	C150	3613																				
	IPPSF#	563	200	1246	1374	1375	1376	1377	1378	2082	2083			1737	1738	1739	1744	1755					1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1829	1034	1836	1837			1741	1742	1743	1746	1748	17.74		
	C of V	0.0139	0.0115	0.0083	0.0199	0.0069						0.0121	0.0023	0.0099	0.0056	0.0082	0.0053	0.0053	0.0232	0.0132	0.005	0.0100	0.0021	0.0079	0.0073	0											0 000	0.0029	0.0090	0.0050	0	0	0.0101	0000	0.0080	2,00.0
ancile	DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop								B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-ECH	ноля-я		B3000	B3000	B3000	B3000													B15000	B15000	B15000	B15000	B15000	ļ		
3	IPPSF#					2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	2524	2525	2527	2534	:										MEAN	SEM	2536	2541	2542	2543	2544		MEAN	OLUM

Analysis of Variance

All Groups

	•	Anova: Single Factor	gle Factor			
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	A	5	0.0604	0.0121	0.000027	
B-EtOH	ΑB	<b>∞</b>	0.0802	0.0100	0.000036	
B3000	ΑB	٣	0.0274	0.0091	0.00000	
B15000	ΑB	6	0.0241	0.0080	0.000007	
C-NoTop	В	10	0.0640	0.0064	0.000010	
с-етон	Д	2	0.0323	0.0065	0.000008	
C1500	щ	9	0.0313	0.0052	0.000005	
C3000	В	15	0.1017	0.0068	0.000015	
ANONA						
Source of Variation	SS	дþ	SW	F	P-value	Forit
Between Groups	0.00022	7	0.00003	1.9805	0.0779	2.2118
Within Groups	0.00075	47	0.00002			
Total	0.0010	54				
*****	2220	;				

CPTC vs Battelle

		Anova: Single Factor	gle Factor			
SUMMARY			!			
Groups	T-Grouping	Count	Sum	Average	Variance	
Battelle	Ą	16	0.1921	0.0101	0.000023	
CPTC	В	36	0.2293	0.0064	0.000011	
ANOVA						
Source of Variation	SS	Яþ	SW	F	P-value	F crit
Between Groups	0.0002	_	0.00017	11.6488	0.0012	4.0230
Within Groups	0.0008	53	0.00001			
Total	0.0010	22				

Note: IPPSFs 2534, 2542, and 2543 assumed linear flow rates. These were not used in the calculation of the means or the analysis of variance.

### Vascular Resistance:

Figure 6 and 7 demonstrate the analysis of CPTC vascular resistance (VR) profiles, demonstrating a previously documented dose response increase in VR with HD. Figures 8 and 9 represent the identical treatment of Battelle data. Note the individual variations, lack of a consistent within-treatment profile shape, and lack of a between-treatment dose response. This can be seen especially well in Figures 7b and 9b, where the treated Battelle IPPSF shapes do not differ from the controls. The normal analysis used by CPTC is to assess treatment changes in VR normalized by the initial value. However, this assumes similar shape profiles within a treatment and just improves the statistical power of the study. This analysis worsened the Battelle data and thus for clarity, we elected to use the raw data to illustrate protocol and technique defects. Note the overall higher VR (2X) in Battelle vs CPTC no-topical-dose controls. Also, unlike CPTC, the variance of the VR (see error bars) increases over the course of the experiment in these control flaps. This is a serious concern since it suggests the control preparation is not "normal" and thus would not be expected to biologically respond to treatments in a normal behavior. Unfortunately, this is what happened.

Table 3a lists the VR CV and the results of ANOVA. Note that the CPTC vascular resistance is significantly higher (P = 0.0001) than the Battelle VR CV. This result is confirmed by SAS ANOVA (see Appendix A(2a)). This is due to the increase in VR over time for CPTC flaps, and the lack of this increase in Battelle flaps. Table 3b lists the VR regression  $R^2$  measures and the ANOVA results. The means of the  $R^2$  for CPTC is significantly closer to 1 than is the Battelle  $R^2$ , suggesting a better fit to the linear regression analysis for CPTC flaps. This emphasizes the inconsistency of the flow rates seen in the Battelle data, which makes its use as a parameter of toxicologic effect problematic.

There is one consistent hypothesis that may explain the abnormal VR profiles seen in the control Battelle IPPSFs (and thus the treated ones). We know that there is a certain amount of time required for VR to reach an equilibrium which is associated with a concomitant swelling of the flap. We have had problems in the past when the Stomahesive templates were applied *prior* to this swelling since constriction results. This is a deviation from the CPTC protocol and may be a significant problem.

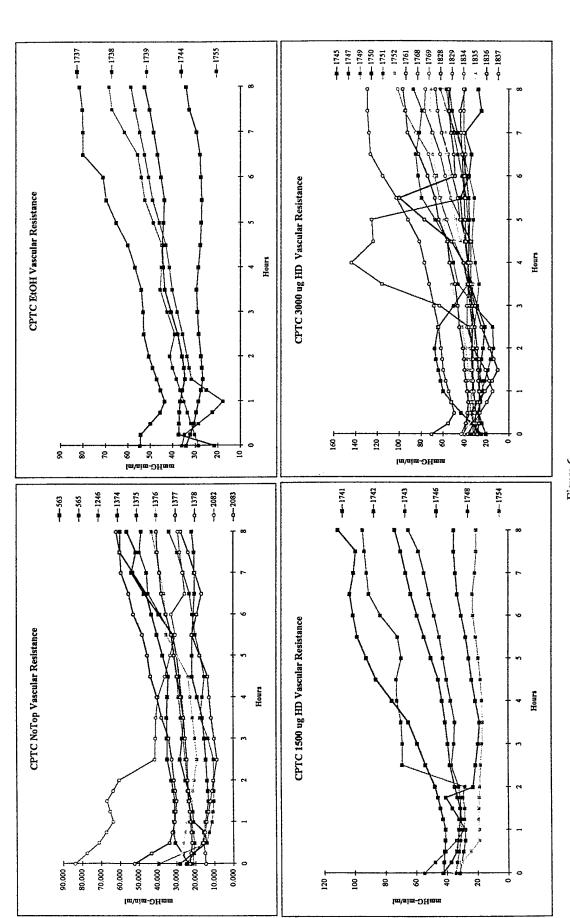
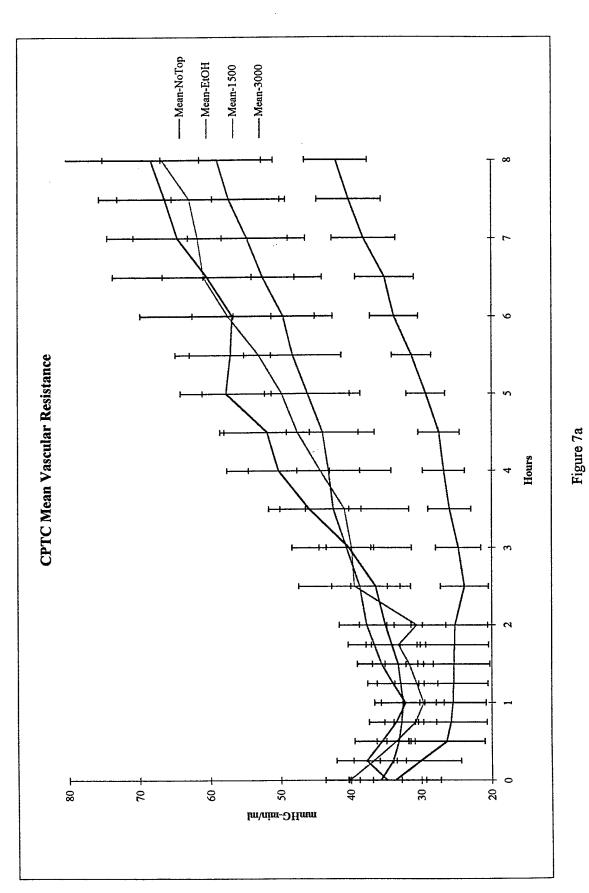


Figure 6

CPTC Individual Vascular Resistance

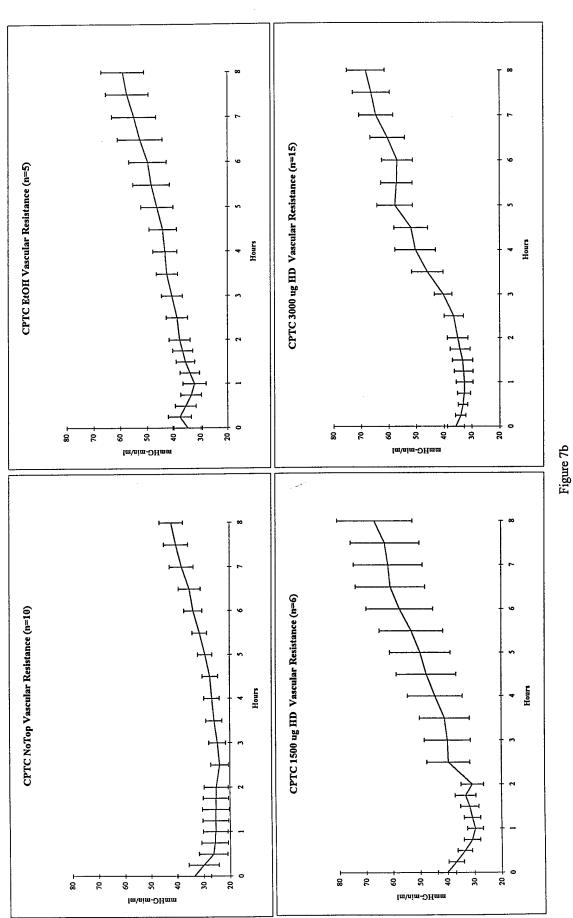
Adjustments were made in the catheter position in IPPSFs 1836 and 1837 to allow a drop in pressure



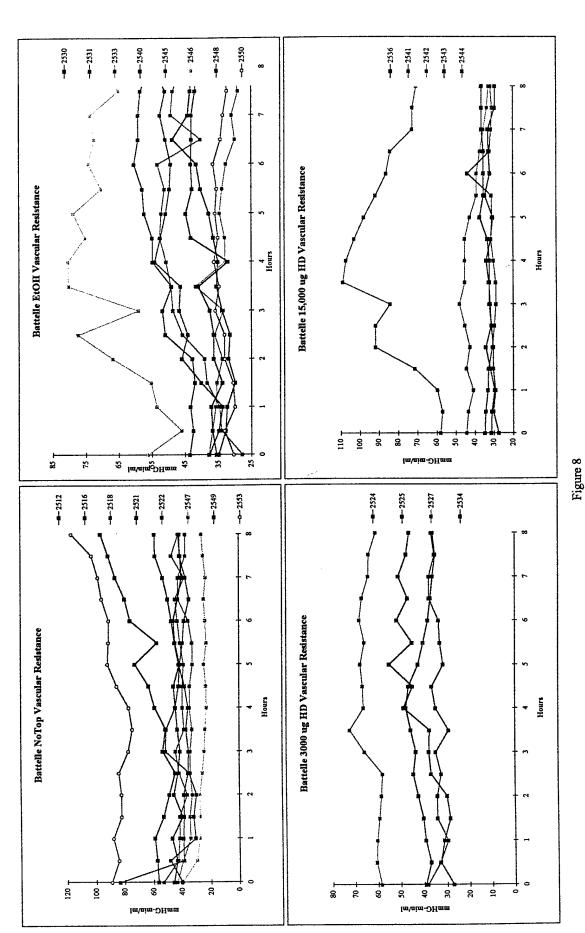
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CPTC Mean Vascular Resistance

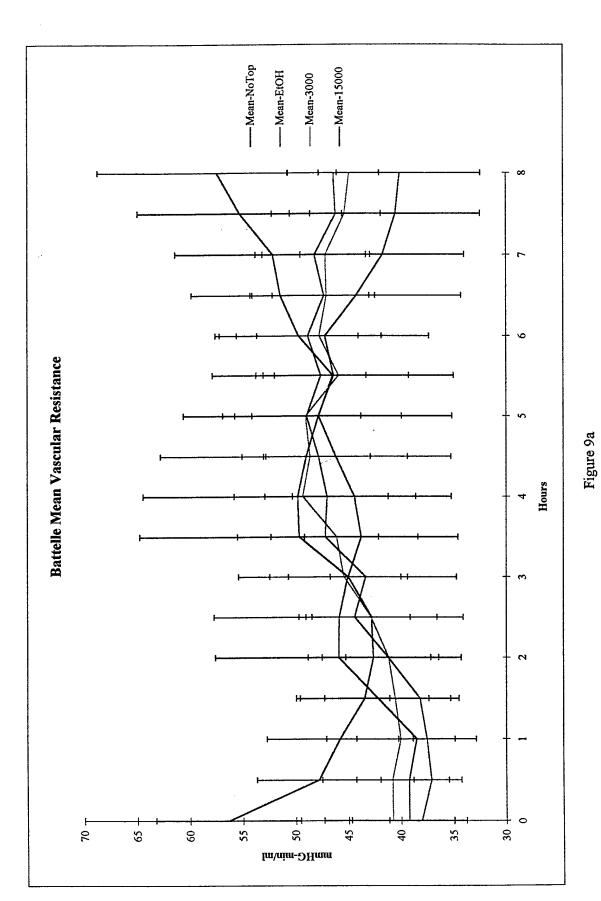


CPTC Mean Vascular Resistance



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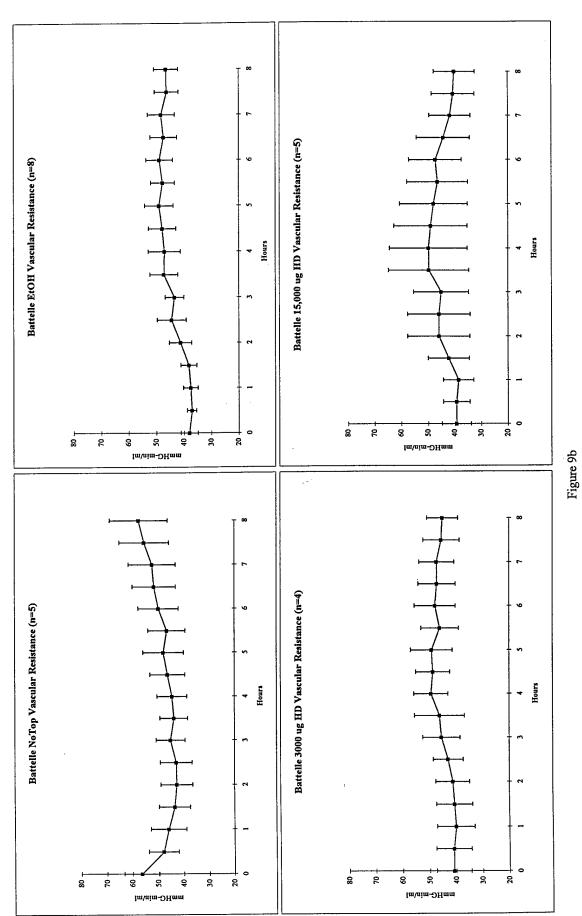
Battelle Individual Vascular Resistance



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ettelle Maan Vascular Besistance

Battelle Mean Vascular Resistance



(::::

Battelle Mean Vascular Resistance

# Table 3a VASCULAR RESISTANCE

<u>(</u>

# CPTC vs Battelle Vascular Resistance Coefficient of Variance

CPTC	
Battelle	

			C-NoTop 0.0621	C-NoTop 0.0911	C-NoTop 0.0752	C-NoTop 0.0678	C-NoTop 0.0546	C-NoTon 0.0800			0.0079	C-ETOH 0.0427	C-ETOH 0.0508	C-ETOH 0.0596	C-ETOH 0.0195	C-ETOH 0.0638				0.0473	0.0078	C3000 0.0580	C3000 0.0618	C3000 0.0734		C3000 0.1288					C3000 0.1733	0.0841	١					C1500 0.0608	
#			1246 C-		1375 C.							1737 C	1738 C	1739 C	_	1755 C								1749							1837		ł					1748	
CofV	0.0125	0.0227	0.0390	0.0394	0.0287					0.0285	0.0051	0.0348	0.0315	0.0223	0.0238	0.0412	0.0373	0.0340	0.0149	0.0300	0.0031	0.0529	0.0190	0.0159	0.0235							0.0279	0.0085	0.0121	0.0257	0.0268	0.0216	0.0490	
DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop	•						B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH	B-EtOH			B3000	B3000	B3000	B3000									B15000	B15000	B15000	B15000	B15000	
IPPSF#	2521	2522	2547	2549	2553					MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM	2524	2525	2527	2534							MEAN	SEM	2536	2541	2542	2543	2544	

## Analysis of Variance

All Groups

	V	Anova: Single Factor	e Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	υ	5	0.1423	0.0285	0.00013	
B-EtOH	ບ	<b>∞</b>	0.2398	0.0300	0.00008	
B3000	ပ	4	0.1114	0.0279	0.00029	
B15000	ບ	5	0.1352	0.0270	0.00018	
C-NoTop	В	10	0.5758	0.0576	0.00062	
C-ETOH	BC	5	0.2364	0.0473	0.00031	
C1500	ΑB	9	0.4050	0.0675	0.00021	
C3000	Α	15	1.2618	0.0841	0.00112	
ANOVA						
Source of Variation	SS	ф	SW	F	P-value	F crit
Between Groups	0.0293	7	0.0042	7.9945	0.0001	2.1992
Within Groups	0.0262	20	0.0005			
Total	0.0555	27				

## CPTC vs Battelle

	∢	Anova: Single Factor	e Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
Battelle	В	22	0.6287	0.0286	0.00013	
CPTC	A	36	2.4791	0.0689	0.00087	
ANOVA						
Source of Variation	SS	ф	WS	F	P-value	Font
Between Groups	0.0222	1	0.0222	37.2605	0.0001	4.0130
Within Groups	0.0333	26	0.0006			
Total	0.0555	57				

# Table 3b VASCULAR RESISTANCE

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CPTC vs Battelle Vascular Resistance Regression R2 Measure

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	R²	0.8323	0.2423	
CPTC	DOSE	C-NoTop	C-NoTop	
	IPPSF#	563	565	
	<b>R</b> 3	0.1445	0.0318	
Battelle	DOSE	B-NOTOP 0.1445	B-NOTOP	
	IPPSF#	2521	2522	

R²	0.8323	0.2423	1.0000	0.7861	0.9050	0.6511	0.9442	0.5381	1.0000	0.9999	0.7899	0.0784	0.8147	0.8723	0.9538	0.0067	0.8714				0.7038	0.1757	0.2369	0.0003	0.5783	0.7384	0.8362	0.9528	0.5842	0.8899	0.7914	0.9188	0.8409	0.8663	0.8552	0.4370	0.0271	0.6369	0.0829	0.8629	0.1124	0.7678	0.9445	0.8628	0.0459	0.5994	0.1663
DOSE	C-NoTop			с-етон	C-ETOH	C-ETOH	C-ETOH	C-ETOH						C3000			C1500	C1500	C1500	C1500	C1500	C1500																									
IPPSF#	563	265	1246	1374	1375	1376	1377	1378	2082	2083	MEAN	SEM	1737	1738	1739	1744	1755				MEAN	SEM	1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1829	1834	1835	1836	1837	MEAN	SEM	1741	1742	1743	1746	1748	1754	MEAN	SEM
R²	0.1445	0.0318	0.4063	0.0033	0.4587						0.2089	0.0946	0.7507	0.8183	0.5338	0.5160	0.4787	0.3185	0.7451	0.2026	0.5455	0.0769	0.7377	0.0911	0.2371	0.1105												0.2941	0.1514	0.0065	0.000	0.5597	0.8841	0.0671		0.3035	0.1787
DOSE	B-NOTOP	B-NOTOP	B-NOTOP	B-NOTOP	B-NOTOP								B-EtOH			B3000	B3000	B3000	B3000														B15000	B15000	B15000	B15000	B15000										
IPPSF#	ı	2522			2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM	2524	2525	2527	2534												MEAN	SEM	2536	2541	2542	2543	2544		MEAN	SEM

## Analysis of Variance

All Groups

	An	Anova: Single Factor	Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NOTOP	ပ	5	1.0447	0.2089	0.0448	
B-EtOH	ABC	œ	4.3636	0.5455	0.0473	
B3000	BC	4	1.1763	0.2941	0.0917	
B15000	BC	٠	1.5174	0.3035	0.1597	
C-NoTop	A	10	7.8990	0.7899	0.0615	
C-ETOH	¥	S	3.5188	0.7038	0.1543	
C1500	ΑB	9	3.5962	0.5994	0.1660	
C3000	AB	15	9.5536	0.6369	0.1030	
ANOVA						
Source of Variation	SS	дį	SJW	t.	P-value	Forit
Between Groups	1.9590	7	0.2799	2.8750	0.0133	2.1992
Within Groups	4.8672	80	0.0973			
Total	6 8767	7.5				

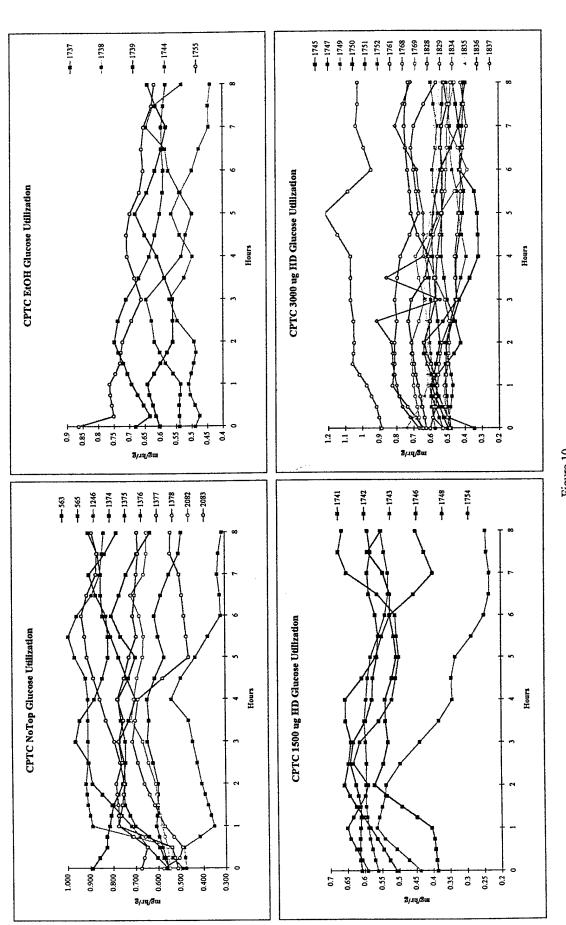
## CPTC vs Battelle

	Ā	Anova: Single Factor	: Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Average Variance	
Battelle	В	22	8.1021	0.3683	0.0879	
CPTC	¥	36	24.568	0.6824	0.1038	
ANOVA						
Source of Variation	SS	ď	MS	F	P-value	Forit
Between Groups	1.3477		1.3477	13.7757	0.0005	4.0130
Within Groups	5.4785	<b>2</b> 6	0.0978			
Total	6.8262	57				

### Glucose Utilization:

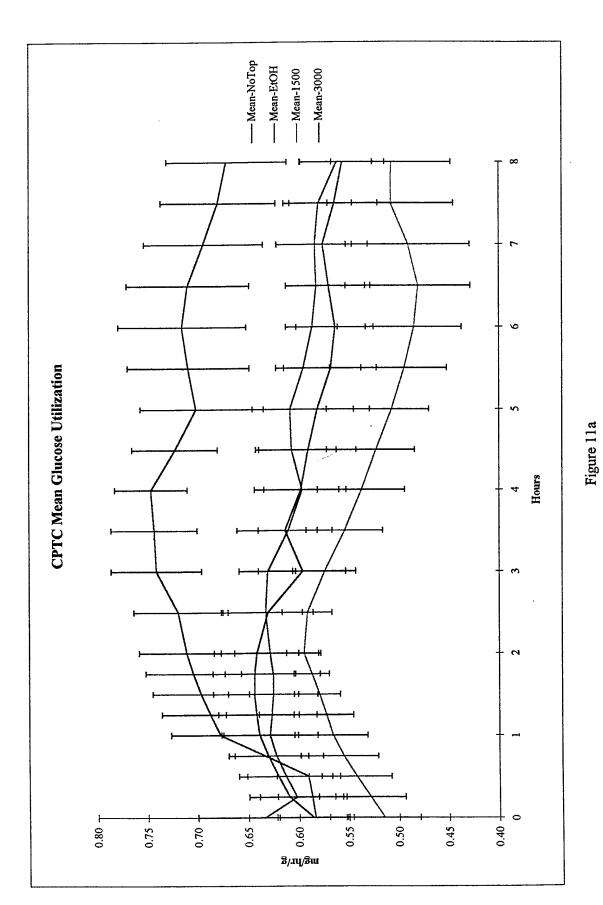
Figures 10 and 11 depict glucose utilization (GU) for CPTC and Figures 12 and 13 for Battelle skin flaps. The most significant comparison is the decreasing GU in Battelle control and EtOH skin flaps. This is best compared by looking at individual flaps due to the inherent flap-to-flap variability. Control CPTC GU profiles usually peak at 1 hour and then remain flat. We previously attributed this initial burst to lactate washout which allows glycolysis to occur. With Battelle flaps, there is a uniform decrease at 3 hours in all treatments. Control flaps should remain flat. This is also seen in Figures 11b and 13b. Because of the difference in control profiles, it is very difficult to interpret treated flaps since one is essentially looking at two models. Consistent with the abnormal VR profiles and unstable flow rates of the control preparations, this pattern of decreasing GU suggests a loss of viability. This defect carries over all treatment groups.

Table 4 lists the GU CV and the results of ANOVA. In all cases, Battelle CV for GU is greater than CPTC indicating increased inter-individual variability, a finding seen with the other parameters.



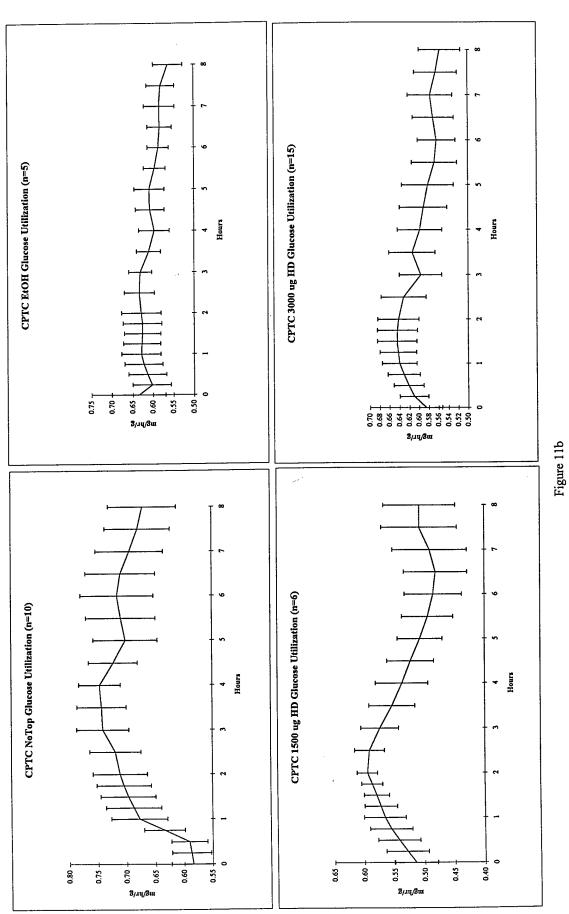
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Figure 10
CPTC Glucose Utilization

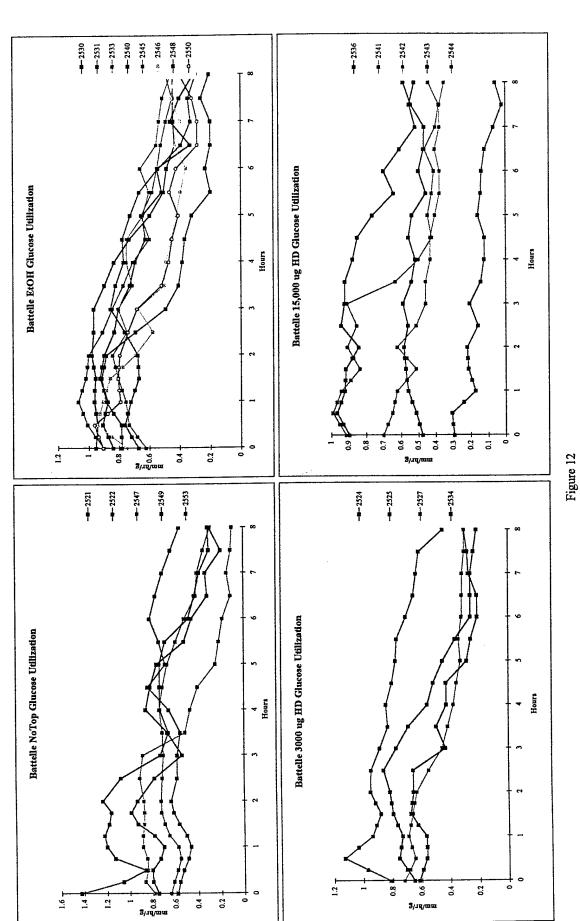


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CPTC Glucose Utilization



CPTC Glucose Utilization



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Battelle Individual Glucose Utilization

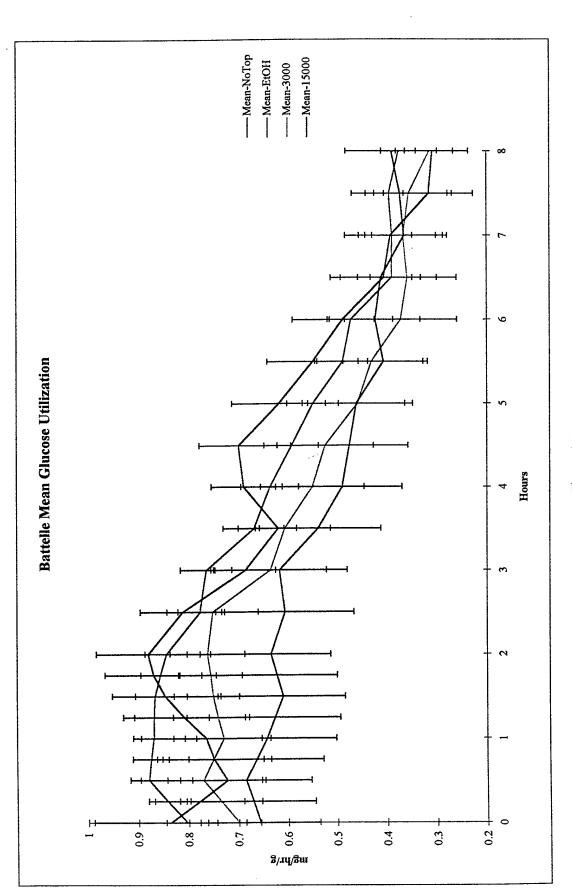
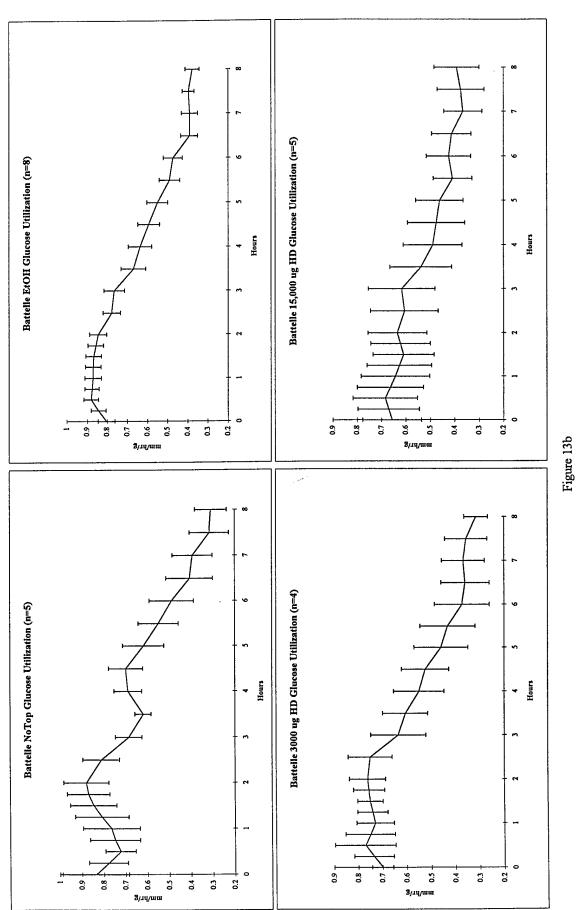


Figure 13a

Battelle Mean Glucose Utilization



 $\left( \begin{array}{c} -1 \\ \vdots \end{array} \right)$ 

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Battelle Mean Glucose Utilization

# Table 4 GLUCOSE UTILIZATION

# CPTC vs Battelle Glucose Utilization Coefficient of Variance

Analysis of Variance

All Groups

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	CofV	0.0279
CPTC	DOSE	C-NoTop
	IPPSF#	563
	CofV	0.0760
Battelle	DOSE	B-NoTop
	IPPSF#	2521

	LONG D	09200	653	O MoTon	02000
	D-INOTOP	0.0700	565	C NoTon	0.0209
	B-NoTon	0.1273	1246	C-NoTop	0.0293
	B-NoTop	0.0891	1374	C-NoTop	0.0168
	B-NoTop	0.0489	1375	C-NoTop	0.0149
			1376	C-NoTop	0.0375
			1377	C-Nolop	0.0360
			2082	C-NoTop	0.0186
1			2083	C-NoTop	0.0133
l		0.0756 0.0159			0.0262
ı	B-EtOH	0.0642	1737	C-ETOH	0.0188
	B-EtOH	0.1146	1738	C-ETOH	0.0158
	B-EtOH	0.0348	1739	C-ETOH	0.0115
	B-EtOH	0.0639	1744	C-ETOH	0.0169
	B-EtOH	0.0648	1755	C-ETOH	0.0175
	B-EtOH	0.0731			
	B-EtOH	0.0566			
- 1	B-EtOH	0.0813			
		0.0691			0.0161
- [		0.0081			0.0013
	B3000	0.0783	1745	0300	0.0351
	B3000	0.0727	1749	3000	0.0153
	B3000	0.0858	1750	C3000	0.0197
			1751	C3000	0.0403
			1752	C3000	0.0063
			1761	C3000	0.0139
			1768	C3000	0.0305
			1769	C3000	0.0394
			1828	C3000	0.0217
			1829	C3000	0.0169
			1834	C3000	0.0146
			1835	C3000	0.0170
			1836	C3000	0.0136
- 1			1837	C3000	0.0265
MEAN		9690.0			0.0219
. !		0.0097			0.0026
	B15000	0.0174	1741	C1500	0.0084
	B15000	0.0982	1742	C1500	0.0313
	B15000	0.0498	1743	C1500	0.0670
	B15000	0.0417	1746	C1500	0.0287
	B15000	0.0766	1748	C1500	0.0209
ı			1754	C1500	0.0091
MEAN		0.0567			0.0276
		0.0140			0.0088

	<b>∀</b>	Anova: Single Factor	le Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	¥	5	0.3782	0.0756	0.00127	
B-EtOH	4	00	0.5531	0.0691	0.00052	
B3000	4	4	0.2784	9690'0	0.00038	
B15000	4	5	0.2837	0.0567	0.00098	
C-NoTop	В	10	0.2616	0.0262	0.00009	
C-ETOH	ф	S	0.0805	0.0161	0.00001	
C1500	щ	9	0.1654	0.0276	0.00046	
C3000	В	15	0.3287	0.0219	0.00010	
						_
ANOVA						
Source of Variation	SS	fр	SJW	Ŗ	P-value	Fcrit
Between Groups	0.0287	7	0.0041	11.1403	0.0001	2.1992
Within Groups	0.0184	20	0.0004			
Total	0.0470	23				
				-		

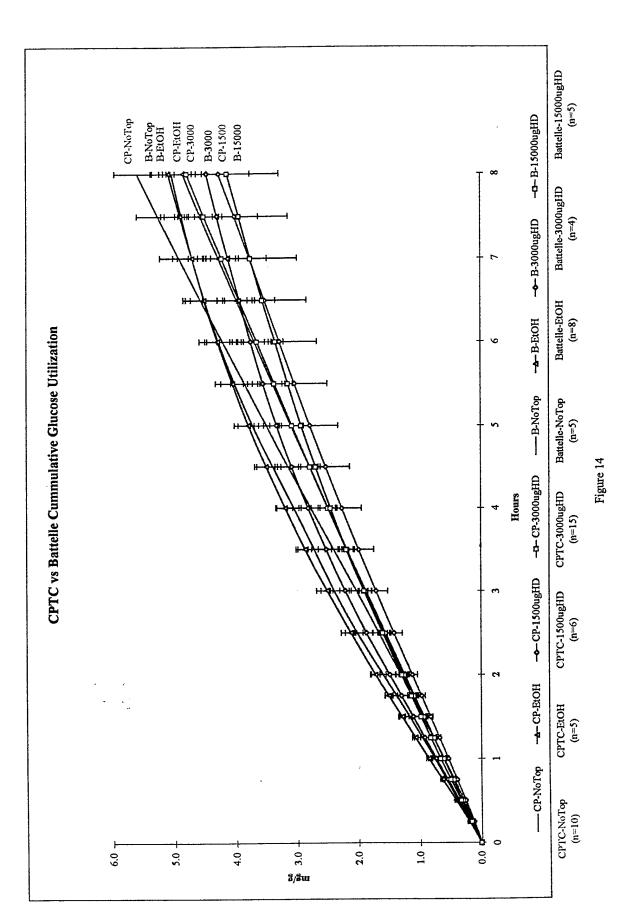
		Varianc	0.0007	
		Average	6190.0	0000
le Factor		Sum	1.4934	200
Anova: Single Factor		Count	22	26
•		T-Grouping	A	۶
	SUMMARY	Groups	Battelle	OTGO

CPTC vs Battelle

_									
_						Forit	4.0130		
	Variance	0.00070	0.00015			P-value	0.0001		
	Average	6.0679	0.0232			F	77.0152		
	Sum	1.4934	0.8362			SM	0.0272	0.0004	
	Count	77	36			df	-	99	57
	T-Grouping	Ą	В			SS	0.0272	0.0198	0.0470
CONTRACTO	Groups	Battelle	CPTC	ANOINA	ANOVA	Source of Variation	Between Groups	Within Groups	Total

#### **Cumulative Glucose Utilization:**

Figure 14 gives the clearest indication of the differences between CPTC and Battelle flaps. The majority of our published analyses utilize cumulative glucose utilization (CGU) as a biomarker of toxicity. In <u>all</u> of our previous work, CGU is linear and thus can be compared by slopes. In Figure 14, all of Battelle CGUs are not linear after about 3-3.5 hours where they plateau. This is clearly seen in Table 5 where the slopes from 0-3.5 and 4-8 hours are compared. This should not occur in control flaps. What is particularly significant is that this shape also carries over onto treatments, suggesting that the flaps are loosing viability after 3 hours making interpretation of compound effect impossible. In short, after 3 hours the flaps become "flops".



CPTC vs Battelle Cummulative Glucose Utilization

Table 5

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CPTC vs Battelle Cummulative Glucose Utilization Slopes (0-3.5 hours vs 4-8 hours)

B-15000ugHD	0.011	0.166	0.335	0.504	0.667	0.826	0.980	1.134	1.292	1.602	1.907	2.196	0.627	0.028	2.453	2.695	2.929	3.146	3.354	3.563	3.758	3.942	4.133	0.418	0.823
B-3000ugHD	0.012	0.179	0.368	0.558	0.743	0.927	1.113	1.301	1.491	1.869	2.216	2.526	0.731	0.012	2.815	3.084	3.329	3.552	3.753	3.936	4.117	4,298	4.465	0.407	1.265
В-ЕтОН	0.013	0.206	0.421	0.640	0.858	1.075	1.292	1.508	1.720	2.126	2.511	2.869	0.829	0.026	3.195	3.502	3.787	4.047	4.287	4.503	4.698	4.894	5.087	0.467	1.418
B-NoTop	0.014	0.202	0.390	0.573	0.763	0.959	1.166	1.380	1.599	2.022	2.396	2.722	0.792	-0.005	3.049	3.396	3.725	4.016	4.276	4.500	4.699	4.876	5.033	0.494	1.213
CP-3000ugHD	0.010	0.149	0.303	0.460	0.619	0.779	0.940	1.101	1.261	1.580	1.887	2.189	0.629	-0.004	2.492	2.789	3.082	3.370	3.653	3.936	4.223	4.508	4.788	0.573	0.211
CP-1500ugHD	0.009	0.130	0.264	0.402	0.542	0.684	0.828	0.974	1.122	1.419	1.710	1.992	0.573	-0.019	2.265	2.530	2.788	3.038	3.283	3.525	3.768	4.017	4.271	0.498	0.290
CP-EtOH	0.011	0.155	0.307	0.461	0.618	0.775	0.931	1.088	1.245	1.560	1.876	2.186	0.625	-0.003	2.488	2.789	3.093	3.394	3.690	3.982	4.274	4.565	4.850	0.591	0.136
CP-NoTop	0.010	0.146	0.294	0.447	0.611	0.781	0.954	1.129	1.306	1.664	2.029	2.400	0.688	-0.051	2.773	3.140	3.496	3.849	4.205	4.561	4.912	5.256	5.593	0.706	-0.036
Hours	0	0.25	0.5	0.75		1.25	1.5	1.75	7	2.5	n	3.5	Slope	intercept	4	4.5	5	5.5	9	6.5	7	7.5	8	Slope	intercept



Table 6 Histology Scores

TASK							ніст	OLOGY	ĺ			
PHASE   DATE   PPSF   ANIMAL   PRISTER   DRIGH   VESICLE   BASAL   VESSEL   NFLAM   BLISTERS   DOSE   SELECTION	TASK				FLAP	MICRO-	DARK	RBCs in	DERMAL	GROSS		
1		DATE	IPPSF#	ANIMAL#	ORIGIN	VESICLES	BASAL	VESSELS	INFLAM	BLISTERS	DOSE	SELECTION
1		1-Feb	2501	95-263-3	R	0	0	0	1	PRE-D	NoTop	no pressure
T   2-Feb   2503   95-18-3   R   0   0   0   NONE   NoTop   hi pressure   1   2-Feb   2504   95-18-3   L				95-263-3	L					NONE	NoTop	
1   S-Feb   2504   95-18-3   L   0   0   0   PRE-D   EIOH   integrity	I			95-18-3	R	0	0	0	0	NONE	NoTop	
T					L						aborted	
T					R	0	0	0	0	PRE-D		
T					L	0	0	0	1	NONE	EtOH	hi pressure
T					R	0	0	0	0	POST-D	NoTop	
T				95-258-1	L	0	0	0	0	POST-D	NoTop	
T				95-21-2	R	1	0	0	0	POST-D		
To   16-Feb   2511   95-22-1   R			2510	95-21-2	L	1	0			POST-D		
1   22-Feb   2513   95-21-3   R				95-22-1	R	0	0					
1   22-Feb   2514   95-21-3   L   1   0   1   0   NONE   NOTOD   RBC's   I   23-Feb   2515   95-22-2   R   0   0   0   1   1   NONE   NOTOD   RBC's   I   23-Feb   2515   95-22-2   L   0   0   0   0   NONE   NOTOD   RBC's   I   23-Feb   2516   95-22-2   L   0   0   0   0   NONE   NOTOD   RBC's   I   23-Feb   2516   95-22-2   L   0   0   0   0   NONE   NOTOD   highessure   I   1-Mar   2518   95-24-4   R   0   0   1   0   NONE   NOTOD   highessure   I   1-Mar   2518   95-24-4   L   0   0   0   0   NONE   NOTOD   highessure   I   7-Mar   2519   95-24-3	I	16-Feb	2512	95-22-1	L	0	0					
1   22-Feb   2515   95-22-2   R	I	22-Feb	2513	95-21-3	R	11						
1   23-Feb   2516   95-22-2   L   O   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2517   95-24-4   R   O   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2517   95-24-4   R   O   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2518   95-24-4   L   O   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2519   95-24-3   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2519   95-24-3   O   O   O   NONE   NOTOP   hi pressure   I   1-Mar   2519   95-24-3   O   O   O   NONE   NOTOP   SELECTED   I   16-Mar   2521   95-24-1   R   O   O   O   O   NONE   NOTOP   SELECTED   I   16-Mar   2522   95-24-1   R   O   O   O   O   NONE   NOTOP   SELECTED   I   16-Mar   2522   95-24-1   R   I   I   I   O   NONE   3000 ug HD   RBCs   II   22-Mar   2523   95-201-11   L   I   I   I   O   NONE   3000 ug HD   RBCs   II   22-Mar   2524   95-201-11   L   I   I   I   O   NONE   3000 ug HD   SELECTED   II   23-Mar   2525   95-202-7   L   O   I   I   O   NONE   3000 ug HD   SELECTED   II   23-Mar   2526   95-202-7   L   O   I   I   O   PRE-D   EIGH   RBCs   II   29-Mar   2527   95-206-6   R   I   I   O   PRE-D   EIGH   RBCs   II   29-Mar   2529   95-205-6   R   I   I   O   PRE-D   EIGH   RBCs   II   29-Mar   2529   95-205-6   R   I   I   O   POST-D   3000 ug HD   RBCs   II   30-Mar   2529   95-205-6   R   I   I   O   PRE-D   EIGH   RBCs   II   S-Apr   2531   95-224   R   I   I   O   PRE-D   EIGH   RBCs   II   S-Apr   2531   95-224   R   I   I   O   PRE-D   EIGH   RBCs   II   S-Apr   2533   95-205-6   R   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2533   95-205-6   R   O   I   O   PRE-D   EIGH   RBCs   II   S-Apr   2533   95-205-6   R   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2533   95-205-6   R   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2533   95-205-6   R   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2537   95-205-6   R   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2537   95-205-6   R   O   O   O   O   PRE-D   BIGH   RBCs   II   S-Apr   2538   95-205-6   R   O   O   O   O   O   PRE-D   BIG	I	22-Feb	2514	95-21-3	L	1						
I   1-Mar   2517   95-24-4   R   0   0   0   1   0   NONE   NoTop   hi pressure   1   1-Mar   2518   95-24-3	I	23-Feb	2515	95-22-2	R	0						
1   1-Mar   2518   95-24-4   L   0   0   0   0   NONE   NoTop   hi pressure   1   7-Mar   2519   95-24-5	I	23-Fcb	2516	95-22-2								
1	I	1-Mar	2517	95-24-4		0						
1   R-Mar   2520   95-24-5   R   0   0   0   0   NONE   NoTop   SELECTED	I	1-Mar	2518	95-24-4	L	0	0	0	0	NONE		
1   16-Mar   2521   95-24-1   R   0   0   0   0   0   NONE   NOTOP   SELECTED       1   16-Mar   2522   95-24-1   L   0   0   0   0   0   NONE   NOTOP   SELECTED       1   16-Mar   2523   95-20-11   R   1   1   1   0   NONE   NOTOP   SELECTED       1   1   1   22-Mar   2524   95-20-11   L   1   1   0   0   NONE   3000 ug HD   RBC's       1   1   22-Mar   2524   95-20-11   L   1   1   0   0   NONE   3000 ug HD   SELECTED       1   23-Mar   2525   95-20-7   L   0   1   1   0   PRE-D   EIOH   RBC's       1   29-Mar   2527   95-20-6   R   1   1   0   1   NONE   3000 ug HD   SELECTED       1   29-Mar   2528   95-20-6   L   0   0   1   0   NONE   3000 ug HD   RBC's       1   29-Mar   2529   95-20-6   L   0   0   1   0   NONE   3000 ug HD   RBC's       1   30-Mar   2529   95-20-6   L   0   0   1   0   NONE   3000 ug HD   RBC's       1   30-Mar   2529   95-20-6   L   0   1   0   NONE   8000 ug HD   RBC's       1   30-Mar   2529   95-20-6   L   0   1   0   NONE   EIOH   SELECTED       1   30-Mar   2529   95-20-6   L   0   1   0   NONE   EIOH   SELECTED       1   30-Mar   2530   95-20-4   L   1   1   1   0   PRE-D   EIOH   RBC's       1   5-Apr   2531   95-20-4   R   1   1   0   NONE   EIOH   RBC's       1   6-Apr   2533   95-20-6   R   0   0   0   NONE   EIOH   SELECTED       1   10-Apr   2533   95-20-6   R   0   0   0   PRE-D   EIOH   RBC's       1   12-Apr   2535   95-1-4   R   NOTOP   Stopped       1   12-Apr   2536   95-1-4   R   NOTOP   Stopped       1   12-Apr   2537   95-20-7   R   0   1   1   NONE   15000 ug HD   RBC's       1   13-Apr   2538   95-20-7   R   0   1   1   NONE   EIOH   SELECTED       1   13-Apr   2538   95-20-7   R   0   1   0   NONE   EIOH   SELECTED       1   12-Apr   2540   95-20-7   R   0   1   0   NONE   EIOH   SELECTED       1   12-Apr   2540   95-20-7   R   0   1   0   NONE   EIOH   SELECTED       1   12-Apr   2540   95-20-7   R   0   1   0   NONE   EIOH   SELECTED       1   12-Apr   2541   95-21-7   R   0   1   0   NONE   EIOH   SELECTED       1   12-Apr   2543   95-20-7   R   0   1   0	I	7-Mar	2519	95-24-3								
1   16-Mar   2532   95-24-1   L   0   0   0   0   NONE   NOTOP   SELECTED   II   22-Mar   2532   95-20-1   R   1   1   1   0   NONE   3000 ug HD   SELECTED   II   22-Mar   2524   95-20-1   R   1   1   1   0   0   NONE   3000 ug HD   SELECTED   II   22-Mar   2525   95-20-7   R   1   1   0   0   NONE   3000 ug HD   SELECTED   II   23-Mar   2525   95-20-7   R   1   1   0   0   NONE   3000 ug HD   SELECTED   II   23-Mar   2526   95-20-7   L   0   1   1   0   PRE-D   EICH   RBC's   RB	I	8-Mar	2520									
Toleran	I	16-Mar	2521									
II   22-Mar   2524   95-201-11   L   1   1   0   0   NONE   3000 ug HD   SELECTED   II   23-Mar   2525   95-202-7   R   1   1   0   0   NONE   3000 ug HD   SELECTED   II   23-Mar   2526   95-202-7   L   0   1   1   0   0   NONE   3000 ug HD   SELECTED   II   23-Mar   2526   95-202-7   L   0   1   1   0   PRE-D   EICH   RBC's   II   29-Mar   2527   95-206-6   R   1   1   0   1   NONE   3000 ug HD   SELECTED   II   29-Mar   2528   95-206-6   L   0   0   1   0   NONE   3000 ug HD   SELECTED   II   29-Mar   2528   95-206-6   L   0   0   1   0   NONE   3000 ug HD   RBC's   R   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   1   0   POST-D   3000 ug HD   RBC's   R   1   1   1   1   1   R   R   R   R	I	16-Mar										
R   22-Mar   2525   95-202-7   R   1   1   0   0   NONE   3000 g HD   SELECTED   R   1   1   0   0   RE-D   EIOH   RBCS   R   1   1   0   0   RE-D   EIOH   RBCS   R   1   1   0   0   RE-D   RBCS   R   1   1   0   RBCS   R   1   1   1   1   0   RBCS   R   1   1   1   1   1   1   1   1   1	П	22-Mar										
R	П											
1												
11   29-Mar   2528   95-206-6   L   0   0   1   0   0   0   0   0   0   0												
No.										NONE		
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H												
II   12-Apr   2536   95-1-4   L   1   1   0   1   PRE-D   15000 ug HD   SELECTED   II   13-Apr   2537   95-205-7   R   0   1   1   1   1   NONE   15000 ug HD   RBC's   II   13-Apr   2538   95-205-7   L   4   0   1   0   PRE-D   EIOH   RBC's   II   19-Apr   2539   95-208-5   R   NONE   NONE   NOTOP   SELECTED   II   19-Apr   2540   95-208-5   L   0   1   0   1   NONE   EIOH   SELECTED   II   20-Apr   2541   95-212-7   R   0   1   0   0   NONE   15000 ug HD   SELECTED   II   20-Apr   2542   95-212-7   L   0   1   0   0   NONE   15000 ug HD   SELECTED   II   26-Apr   2543   95-214-11   R   0   0   0   NONE   15000 ug HD   SELECTED   II   26-Apr   2544   95-214-11   L   0   0   0   NONE   15000 ug HD   SELECTED   II   26-Apr   2544   95-214-11   L   0   0   0   NONE   15000 ug HD   SELECTED   II   27-Apr   2545   95-209-4   R   3   1   0   0   NONE   EIOH   SELECTED   II   27-Apr   2546   95-209-4   L   1   1   0   0   NONE   EIOH   SELECTED   II   3-May   2547   95-223-9   R   0   0.5   0   1   NONE   NOTOP   SELECTED   II   3-May   2548   95-223-9   L   0   0   0   0   NONE   EIOH   SELECTED   II   3-May   2548   95-223-9   L   0   0   0   0   NONE   EIOH   SELECTED   II   4-May   2549   95-221-5   R   1   1   0   0   NONE   EIOH   SELECTED   II   4-May   2550   95-221-5   R   1   1   0   0   NONE   EIOH   SELECTED   II   4-May   2551   95-220-7   R   II   10-May   2552   95-220-7   L   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED   II   11-May   2553   95-225-6   R   0							- ·		<u>-</u>	TIGB		
II   13-Apr   2537   95-205-7   R   0   1   1   1   1   NONE   15000 ug HD   RBC's     II   13-Apr   2538   95-205-7   L   4   0   1   0   PRE-D   EtOH   RBC's     II   19-Apr   2539   95-208-5   R   NONE   NOTop   stopped     II   19-Apr   2540   95-208-5   L   0   1   0   0   NONE   EtOH   SELECTED     II   20-Apr   2541   95-212-7   R   0   1   0   0   NONE   15000 ug HD   SELECTED     II   20-Apr   2542   95-212-7   L   0   1   0   0   NONE   15000 ug HD   SELECTED     II   20-Apr   2543   95-214-11   R   0   0   0   NONE   15000 ug HD   SELECTED     II   26-Apr   2543   95-214-11   R   0   0   0   NONE   15000 ug HD   SELECTED     II   27-Apr   2545   95-209-4   R   3   1   0   0   NONE   15000 ug HD   SELECTED     II   27-Apr   2546   95-209-4   L   1   1   0   0   NONE   EtOH   SELECTED     II   3-May   2547   95-223-9   R   0   0.5   0   1   NONE   NOTOP   SELECTED     II   3-May   2548   95-223-9   L   0   0   0   0   NONE   EtOH   SELECTED     II   4-May   2550   95-221-5   R   1   1   0   0   NONE   NOTOP   SELECTED     II   4-May   2550   95-221-5   L   0   0   0   0   NONE   NOTOP   SELECTED     II   10-May   2551   95-220-7   R     Integrity   aborted   integrity     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED     II   11-May   2553   95-225-6   R   0   0   0   NONE   NOTOP   SELECTED						1	1	0	, .	PRF-D		
II									<del></del>			
II												
II						<del></del>	<del>                                       </del>					
II							1	0	1			
II   20-Apr   2542   95-212-7   L   0   1   0   0   NONE   15000 ug HD   SELECTED   II   26-Apr   2543   95-214-11   R   0   0   0   0   NONE   15000 ug HD   SELECTED   II   26-Apr   2544   95-214-11   L   0   0   0   0   NONE   15000 ug HD   SELECTED   II   27-Apr   2545   95-209-4   R   3   1   0   0   NONE   EtOH   SELECTED   II   27-Apr   2546   95-209-4   L   1   1   0   0   NONE   EtOH   SELECTED   II   3-May   2547   95-223-9   R   0   0.5   0   1   NONE   NOTOP   SELECTED   II   3-May   2548   95-223-9   L   0   0   0   1   NONE   EtOH   SELECTED   II   3-May   2548   95-223-9   L   0   0   0   1   NONE   EtOH   SELECTED   II   4-May   2549   95-221-5   R   1   1   0   0   NONE   EtOH   SELECTED   II   4-May   2550   95-221-5   L   0   0   0   0   NONE   EtOH   SELECTED   II   10-May   2551   95-220-7   R   integrity   aborted   integrity   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   0   0   NONE   NOTop   SELECTED   II   11-May   2553   95-225-6   R   0												SELECTED
R		<del></del>										SELECTED
II   26-Apr   2544   95-214-11   L   0   0   0   0   NONE   15000 ug HD   SELECTED   II   27-Apr   2545   95-209-4   R   3   1   0   0   NONE   EtOH   SELECTED   II   27-Apr   2546   95-209-4   L   1   1   0   0   NONE   EtOH   SELECTED   II   3-May   2547   95-223-9   R   0   0.5   0   1   NONE   NoTop   SELECTED   II   3-May   2548   95-223-9   L   0   0   0   1   NONE   EtOH   SELECTED   II   4-May   2549   95-221-5   R   1   1   0   0   NONE   EtOH   SELECTED   II   4-May   2550   95-221-5   L   0   0   0   0   NONE   EtOH   SELECTED   II   10-May   2551   95-220-7   R   II   10-May   2552   95-220-7   L   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED   II   11-May   2553   95-225-6   R   0   0   0   NONE   NoTop   SELECTED		<del></del>		<del></del>								
The color of the												SELECTED
The control of the												
II   3-May   2547   95-223-9   R   0   0.5   0   1   NONE   NoTop   SELECTED     II   3-May   2548   95-223-9   L   0   0   0   1   NONE   EtOH   SELECTED     II   4-May   2549   95-221-5   R   1   1   0   0   NONE   NoTop   SELECTED     II   4-May   2550   95-221-5   L   0   0   0   0   NONE   EtOH   SELECTED     II   10-May   2551   95-220-7   R     integrity   aborted   integrity     II   10-May   2552   95-220-7   L     integrity   aborted   integrity     II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED									<del></del>			
II   3-May   2548   95-223-9   L   0   0   0   1   NONE   EtOH   SELECTED   II   4-May   2549   95-221-5   R   1   1   0   0   NONE   NoTop   SELECTED   II   4-May   2550   95-221-5   L   0   0   0   0   NONE   EtOH   SELECTED   II   10-May   2551   95-220-7   R     integrity   aborted   integrity   II   10-May   2552   95-220-7   L   integrity   aborted   integrity   II   11-May   2553   95-225-6   R   0   0   0   0   NONE   NoTop   SELECTED		<del></del>							<del></del>			
П		<del></del>										
H		<del></del>										SELECTED
П 10-May 2551 95-220-7 R   integrity aborted integrity   П 10-May 2552 95-220-7 L   integrity aborted integrity   П 11-May 2553 95-225-6 R 0 0 0 0 NONE NoTop SELECTED												SELECTED
II		<del></del>				<u> </u>	† <u>-</u>					
											aborted	integrity
11 11-1/16/ 2555   75 225 0   20						0	0	0	0			SELECTED
	П	11-May	2554	95-225-6	L	1	1				EtOH	RBC's

Table 6b Histology Scores--Sorted by Selected IPPSFs

				ı		HIST	OLOGY				
TASK				FLAP	MICRO-	DARK	RBCs in	DERMAL	GROSS		
PHASE	DATE	IPPSF#	ANIMAL#	ORIGIN	VESICLES	BASAL	VESSELS	INFLAM	BLISTERS	DOSE	SELECTION
П	4-May	2549	95-221-5	R	1	1	0	0	NONE	NoTop	SELECTED
П	3-May	2547	95-223-9	R	0	0.5	0	1	NONE	NoTop	SELECTED
Ī	16-Mar	2521	95-24-1	R	0	0	0	0	NONE	NoTop	SELECTED
Ī	16-Mar	2522	95-24-1	L	0	0	0	0	NONE	NoTop	SELECTED
п	11-May	2553	95-225-6	R	0	0	0	0	NONE	NoTop	SELECTED
п	27-Apr	2545	95-209-4	R	3	1	0	0	NONE	EtOH	SELECTED
п	5-Apr	2531	95-22-4	R	1	1	0	0	NONE	EtOH	SELECTED
n	27-Apr	2546	95-209-4	L	1	1	0	0	NONE	EtOH	SELECTED
п	30-Mar	2530	95-205-6	L	0	1	0	0	NONE	EtOH	SELECTED
п	19-Apr	2540	95-208-5	L	0	1	0	1	NONE	EtOH	SELECTED
п	6-Apr	2533	95-207-6	R	0	0	0	0	NONE	EtOH	SELECTED
п	3-May	2548	95-223-9	L	0	0	0	1	NONE	EtOH	SELECTED
II	4-May	2550	95-221-5	L_	0	0	0	0	NONE	EtOH	SELECTED
п	22-Mar	2524	95-201-11	L	1	1	0	0	NONE	3000 ug HD	SELECTED
п	23-Mar	2525	95-202-7	R	1	1	0	0	NONE	3000 ug HD	SELECTED
п	29-Mar	2527	95-206-6	R	1	1	0	1	NONE	3000 ug HD	SELECTED
п	6-Apr	2534	95-207-6	L	0	0	0	0	PRE-D	3000 ug HD	SELECTED
П	12-Apr	2536	95-1-4	L	1	1	0	1	PRE-D	15000 ug HD	SELECTED
п	20-Apr	2541	95-212-7	R	0	1	0	0	NONE	15000 ug HD	SELECTED SELECTED
п	20-Арг	2542	95-212-7	L	0	1	0	0	NONE	15000 ug HD	SELECTED
п	26-Арг	2543	95-214-11	R	0 0	0	0 0	0	NONE NONE	15000 ug HD 15000 ug HD	SELECTED
П	26-Арг	2544	95-214-11	<u>L</u>		0	1	1	NONE	NoTop	RBC's
I	22-Feb	2513	95-21-3	R	1	0	1	0	NONE	NoTop	RBC's
I	22-Feb	2514	95-21-3	L	1	Q.	1	1	NONE	NoTop	RBC's
I	23-Feb	2515	95-22-2	R	0 0	1	1	0	PRE-D	EtOH	RBC's
п	23-Mar	2526	95-202-7	L L	1	1	1	0	PRE-D	EtOH	RBC's
П	5-Apr	2532 2538	95-22-4 95-205-7	L	4	ō	i	0	PRE-D	EtOH	RBC's
n n	13-Apr	2554	95-205-7	L	1	1	i	0	NONE	EtOH	RBC's
n	11-May 22-Mar	2523	95-223-0	R	i	î	ī	Ö	NONE	3000 ug HD	RBC's
П	30-Mar	2529	95-205-6	R	1	ī	î	Ō	POST-D	3000 ug HD	RBC's
П	13-Apr	2537	95-205-7	R	ō	1	1	1	NONE	15000 ug HD	RBC's
п	29-Mar	2528	95-206-6	Ĺ	ŏ	Ō	1	0		NoTop	catheter out
I	2-Feb	2503	95-18-3	R	Ō	0	0	0	NONE	NoTop	hi pressure
Î	9-Feb	2507	95-258-1	R	0	0	0	0	POST-D	NoTop	hi pressure
Ī	9-Feb	2508	95-258-1	L	0	0	0	0	POST-D	NoTop	hi pressure
I	15-Feb	2509	95-21-2	R	1	0	0	0	POST-D	NoTop	hi pressure
I	15-Feb	2510	95-21-2	L	1	0	0	0	POST-D	NoTop	hi pressure
I	16-Feb	2511	95-22-1	R	0	0	0	0	NONE	NoTop	hi pressure
I	16-Feb	2512	95-22-1	L	0	0	0	0	NONE	NoTop	hi pressure
I	23-Feb	2516	95-22-2	L	0	0	0	0	NONE	NoTop	hi pressure
I	1-Mar	2517	95-24-4	R	0	0	1	0	NONE	NoTop	hi pressure
I	1-Mar	2518	95-24-4	L	0	0	0	0	NONE	NoTop	hi pressure
I	8-Feb	2505	95-263-4	R	0	0	0	0	PRE-D	EtOH	hi pressure
I	8-Feb	2506	95-263-4	L	0	0	0	1	NONE	EtOH	hi pressure
I	1-Feb	2501	95-263-3	R	0	0	0	1	PRE-D	NoTop	no pressure
I	1-Feb	2502	95-263-3	L					NONE	NoTop	no pressure
I	2-Feb	2504	95-18-3	L					into-it-	aborted	integrity integrity
П	10-May	2551	95-220-7	R					integrity	aborted	integrity
П	10-May	2552	95-220-7	L					integrity	aborted aborted	pig died
I	7-Mar	2519	95-24-3							aborted	pig died
I —	8-Mar	2520	95-24-5	_						NoTop	stopped
п	12-Apr	2535	95-1-4	R					NONE	NoTop	stopped
п	19-Apr	2539	95-208-5	R					HONE	14010þ	2.0PPou

#### Histology and Length of Surgery:

Table 6 is a list of the histology score for the IPPSF samples we received from Battelle. Table 6b has been sorted by selected flaps. The most visible discrepancy seen from CPTC histology slides was the presence of red blood cells. It is almost impossible to do any further interpretation at this level because based upon the previous data presented, all flaps were not viable and thus histological lesions are meaningless.

Table 7 is a list of the time the pigs were under halothane anesthesia. The average time for halothane exposure at CPTC for Stage I is 2.75 hours-on at about 9:00 AM, off at about 10:45. The average for Stage II is 0.75 hours for the left flap and 1.00 for the right flap-on at about 7:30 AM, off at about 8:15 and 8:30 AM, respectively. These times are significantly shorter than the Battelle surgery times. Numerous factors associated with prolonged surgery could be affecting these results. These include prolonged anesthesia, hypoxia and other subtle physiological changes that would affect flap viability.

The following is the average halothane times sorted by surgeon. We realize that this is not a fair representation; for example, if SB was training the other surgeons his times would naturally be longer.

Surgeon	Stage I	Stage II
CL	4.18 hr	1.21 hr
DLT	4.16 hr	0.89 hr
JT	3.96 hr	0.94 hr
LB	3.96 hr	1.00 hr
PHK	3.69 hr	0.73 hr
SB	3.87 hr	1.07 hr
THS	3.29 hr	1.57 hr

#### Appendix B:

Appendix B is plots of GU, VR, and flow rate for each individual IPPSF. Note the inconsistant flow rates, and the tendency for glucose utilization to drop after about 3 hours.

Table 7
Battelle Halothane Exposure Time

					Stage I H	alothane			Stage II H	alothane	
2506	95-263-4	L	2/6/95					8:35 AM	9:20 AM	0:45	0.75
2507	95-258-1	R	2/7/95	9:20 AM	12:45 PM	3:25	3.42	8:20 AM	9:35 AM	1:15	1.25
2508	95-258-1	L	2/7/95					8:20 AM	9:23 AM	1:03	1.05
2509	95-21-2	R	2/13/95	8:32 AM	12:47 PM	4:15	4.25	8:41 AM	10:18 AM	1:37	1.62
2510	95-21-2	L	2/13/95	0.0212.5				8:41 AM	9:38 AM	0:57	0.95
2511	95-22-1	R	2/14/95	8:32 AM	12:17 PM	3:45	3.75	8:25 AM	9:54 AM	1:29	1.48
2512	95-22-1	L	2/14/95	0.527111	12:17:11:			8:25 AM	9:13 AM	0:48	0.8
2513	95-21-3	R	2/20/95	8:23 AM	1:14 PM	4:51	4.85	8:25 AM	9:40 AM	1:15	1.25
2514	95-21-3	L	2/20/95	0.25 71141	- 1.17 1.11	,,,,,,		8:25 AM	9:15 AM	0:50	0.83
2515	95-22-2	R	2/21/95	8:20 AM	12:24 PM	4:04	4.07	8:20 AM	9:42 AM	1:22	1.37
2516	95-22-2	L	2/21/95	0.20 71147	12.241111		1.07	8:20 AM	8:50 AM	0:30	0.5
2517	95-24-4	R	2/27/95	8:30 AM	12:07 PM	3:37	3.62	8:20 AM	9:21 AM	1:01	1.02
2517	95-24-4		2/27/95	8.50 Auvi	12.07 1141	3.57	5.02	8:20 AM	8:55 AM	0:35	0.58
2519	95-24-3	L	3/7/95	8:31 AM	pig died	pig died	pig died	pig died	pig died	pig died	pig died
2520	95-24-5		3/13/95	8:25 AM	pig died	pig died	pig died	pig died	pig died	pig died	pig died
2521		R	3/13/95	8:52 AM	1:54 PM	5:02	5.03	9:12 AM	10:27 AM	1:15	1.25
	95-24-1			6.32 AIVI	1.54 1 1/1	3.02	2.03	9:12 AM	9:57 AM	0:45	0.75
2522	95-24-1	L	3/14/95	9.22 414	1:24 PM	4:51	4.85	7:30 AM	8:13 AM	0:43	0.73
2523	95-201-11 95-201-11	R	3/20/95	8:33 AM	1:24 FW	4.51	4.63	7:30 AM	7:54 AM	0:24	0.72
2524		F	3/20/95 3/21/95	9.20 434	12:56 PM	4:36	4.6	7:07 AM	9:15 AM	2:08	2.13
2525	95-202-7	R		8:20 AM	12:36 PM	4:30	4.0	7:07 AM	8:55 AM	1:48	1.8
2526	95-202-7	F	3/21/95	0.20 414	1-07 DM	4:28	4.47	8:31 AM	9:31 AM	1:00	1.0
2527	95-206-6	R	3/27/95	8:39 AM	1:07 PM	4.20	4.47		9:04 AM	0:33	0.55
2528	95-206-6	L	3/27/95	0.25 434	12-20 DV	2.54	3.9	8:31 AM			1.25
2529	95-205-6	R	3/28/95	8:35 AM	12:29 PM	3:54	3.9	8:27 AM	9:42 AM	1:15	0.5
2530	95-205-6	L	3/28/95	0.05.43.6	11.14.434	2:20	2.65	8:27 AM	8:57 AM	0:30	
2531	95-22-4	R	4/3/95	8:35 AM	11:14 AM	2:39	2.65	8:34 AM	10:10 AM	1:36	1.6
2532	95-22-4	L	4/3/95	0.54.43.6	1 11 014	4.17	4.00	8:34 AM	9:50 AM	1:16	
2533	95-207-6	R	4/4/95	8:54 AM	1:11 PM	4:17	4.28	8:35 AM	9:40 AM	1:05	1.08
2534	95-207-6	L	4/4/95	0.00 117	10 (4 7) (	4.04	- 4	8:35 AM	9:15 AM	0:40	0.67
2535	95-1-4	R	4/10/95	8:20 AM	12:44 PM	4:24	4.4	8:15 AM	9:14 AM	0:59	0.98
2536	95-1-4	L	4/10/95		12 50 77 5	1.00	4.5	8:15 AM	8:53 AM	0:38	0.63
2537	95-205-7	R	4/11/95	8:29 AM	12:59 PM	4:30	4.5	8:28 AM	9:35 AM	1:07	1.12
2538	95-205-7	L	4/11/95					8:28 AM	9:09 AM	0:41	0.68
2539	95-208-5	R	4/17/95	8:43 AM	1:34 PM	4:51	4.85	8:27 AM	9:44 AM	1:17	1.28
2540	95-208-5	Ī	4/17/95		11.50 :::			8:27 AM	8:59 AM	0:32	0.53
2541	95-212-7	R	4/18/95	8:43 AM	11:59 AM	3:16	3.27	8:17 AM	9:15 AM	0:58	0.97
2542	95-212-7	L	4/18/95		10.00 77.1	0.10		8:17 AM	8:57 AM	0:40	0.67
2543	95-214-11	R	4/24/95	8:42 AM	12:00 PM	3:18	3.3	8:14 AM	9:27 AM	1:13	1.22
2544	95-214-11	L	4/24/95		10.00			8:14 AM	9:01 AM	0:47	0.78
2545	95-209-4	R		8:19 AM	10:50 AM	2:31	2.52	8:12 AM	9:14 AM	1:02	1.03
2546	95-209-4	L	4/25/95					8:12 AM	8:47 AM	0:35	0.58
2547	95-223-9	R	5/1/95	8:44 AM	11:54 AM	3:10	3.17	8:24 AM	9:25 AM	1:01	1.02
2548	95-223-9	L	5/1/95					8:24 AM	9:00 AM	0:36	0.6
2549	95-221-5	R	5/2/95	8:27 AM	11:36 AM	3:09	3.15	8:18 AM	9:06 AM	0:48	0.8
2550	95-221-5	L	5/2/95					8:18 AM	8:48 AM	0:30	0.5
2551	95-220-7	R	5/8/95	8:26 AM	11:40 AM	3:14	3.23	8:31 AM	pig died	pig died	pig died
2552	95-220-7	L	5/8/95					8:31 AM	pig died	pig died	pig died
2553	95-225-6	R	5/9/95	8:23 AM	11:44 AM	3:21	3.35	8:09 AM	9:39 AM	1:30	1.5
2554	95-225-6	L	5/9/95					8:09 AM	9:03 AM	0:54	0.9

Check the pump and flowmeter. The Monostat Cassette Pump may be delivering an inconsistent flow of perfusion. At CPTC, we calibrate our flowmeters over a period of about one hour for seven areas along the flowmeter. Perhaps a calibration over a single minute is not long enough. The Harvard Apparatus Model 1203 peristaltic pump is the pump used at CPTC. These retail for about \$2,850 (1991 price). CPTC charges \$1000 for each IPPSF experiment. If you must throw out 3 experiments due to an unreliable flowrate, you have paid for the pump. Surges in the perfusate flows may cause a loss of viability through shunting through other vessels to leave red blood cells and dead skin.

The problem may not be in the pump, but in the flowmeter. Vascular resistance is pressure divided by flow rate and glucose utilization is the arterial minus the venous glucose reading times the flow rate. If the inconsistency is in the flowmeter, this will have an impact on vascular resistance and glucose utilization. Since these are two important measures in determining HD affect, it is important to get consistent flowmeter readings, either through acquiring a different pump system or more careful study of the flowmeter.

The problem with inconsistent flow rates may also be with the power supply. At CPTC we recently discarded a UPS that produced an inconsistent power level. We did not notice the changes until we attached an electric fan. There was an audible variation in the flow rate of the fan--surges and slow-downs. Perhaps an in-line voltmeter between the outlet and the pump would confirm or eliminate this concern.

RBC's were seen in about 25% of the tissue samples sent to CPTC. This indicates incomplete perfusion of the skin flap. It is interesting that 11 of the 12 IPPSFs with RBC's were flushed with heparinized Dulbecco's PBS prior to perfusion, 1 of the 12 with heparinized saline. This may suggest that the viscosity of the Dulbecco's PBS may be too great for complete flushing of the capillaries in the IPPSF.

We at CPTC are concerned by the number of IPPSF surgeons at Battelle. We generally limit our number of surgeons to three. This ensures that each individual has the opportunity to develop the experience necessary for proper cannulation and tissue handling. The length of both Stage I and II surgeries are too long and could significantly affect flap viability. Too many cooks will spoil the stew.

#### **Executive Summary:**

The attached report is a sequential analysis of all of the isolated perfused porcine skin flap (IPPSF) data submitted by Battelle for comparison with NCSU results. We went through a methodical study of all flaps and selected those IPPSFs which we determined were the best that Battelle produced. The selection criteria is fully documented.

We then proceeded to analyze the primary parameters of IPPSF perfusion and markers of sulfur mustard action in both Battelle and CPTC flaps. These included perfusate flow rate, vascular resistance, normal and cumulative glucose utilization and histology. The conclusion from this analysis is that the control Battelle flaps are highly variable and apparently lose viability at three to four hours after the start of infusion.

We are not sure as to why this is occurring since in all of our experience, we have not seen similar IPPSF profiles. However, there are some indications of potential problems.

#### **Potential Problems:**

- 1.) Too many surgeons precludes any one surgical team from actually getting sufficient experience to master the IPPSF procedure. This is reflected in the prolonged surgery times. Long surgery is associated with numerous problems including longer exposure to anesthetic gases, hypoxia and numerous physiological adaptations. Additionally, inexperienced surgeons tend to produce more subtle tissue damage which is associated with release of cytokines and other inflammatory mediators. Cannulation is not optimal nor reproducible. It is possible that this inexperience coupled with the use of a viscous flushing solution, may have contributed to the abnormal histology seen on many of the earlier flaps. We suggest that the number of surgeons be reduced so that sufficient experience is gained to decrease the length of surgery.
- 2.) There are indications that a major source of variability is related to either maintenance of perfusate flow rate or measurement of flow rate. The concerns outlined in the report should be investigated.
- 3.) One hypothesis for the elevated vascular resistance seen with the flaps relates to when the dosing template is placed on the flap. We hypothesize that placing it on before flap swelling has reached an equilibrium may cause constriction and vascular abnormalities. We have had similar problems on some protocols before. We suggest that surety regulations be modified such that they can be placed on prior to dosing rather than prior to perfusion.
- 4.) It is imperative that we have the ability to analyze control data before treatments begin. In order to accomplish this, we need physiological data and histology submitted as soon after the experiments as possible if we are to be of any help. Also, as with any organization, we require some turn around time to analyze this data.

#### Suggestion for Action:

In an effort to aid Battelle in learning this technology, we suggest that you grant this contract a no-cost extension through June 30, 1996. We would reallocate our funding to be able to provide feedback for you through this time period. We suggest you identify your "best" surgeons, address the above problems and do control IPPSFs until their profiles match those of the CPTC. If this cannot be accomplished, then it is possible that subtle differences in perfusion chambers may be to blame. If this is the case, then we would suggest that you send your team back to NCSU and see what happens if you use our chambers and facilities. We hope that this analysis proves useful and look forward to continued cooperation and hope that the "art" of IPPSF perfusion can be mastered by your staff.

### APPENDIX A(1) Flow Rate Coefficient of Variance

The SAS System
14:56 Wednesday, August 2, 1995

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
FLOWCV	49	0.004 0.005 0.006 0.007 0.008 0.009 0.0023 0.0025 0.0026 0.0027 0.0029 0.0038 0.0039 0.0044 0.0045 0.0047 0.0048 0.0049 0.0051 0.0053 0.0054 0.0056 0.0057 0.0061 0.0062 0.0063 0.0065 0.0068 0.0069 0.0073 0.0079 0.0082 0.0083 0.0084 0.0086 0.0088 0.0094 0.0095 0.0099 0.0101 0.0102 0.0115 0.0121 0.0132 0.0137 0.0139 0.0176 0.0199 0.0232

#### Number of observations in data set = 55

#### Analysis of Variance Procedure

Dependent	Variable:	FLOWCV				
_			Sum of	Mean		
Source		DF	Squares	Square	F Value	Pr > F
Model		7	0.00022072	0.00003153	1.99	0.0768
Error		47	0.00074548	0.00001586		
Corrected	Total	54	0.00096619			
	R	-Square	c.v.	Root MSE	FLO	OWCV Mean
	0	.228440	51.99228	0.0039826	(	0.0076600
Source		DF	Anova SS	Mean Square	F Value	Pr > F
DOSE		7	0.00022072	0.00003153	1.99	0.0768

Analysis of Variance Procedure

Flow Rate Coefficient of Variance

T tests (LSD) for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 47 MSE= 0.000016 Critical Value of T= 2.01 Least Significant Difference= 0.0049 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 5.245902 Means with the same letter are not significantly different.

T Grou	ping	Mean	N	DOSE
	A	0.012100	5	В-NоТор
В	A A	0.010025	8	B-EtOH
B B	A A	0.009100	3	B3000
B B	A A	0.008033	3	B15000
B B		0.006780	15	C3000
B B		0.006460	5	С-ЕТОН
B B		0.006390	10	C-NoTop
B B		0.005217	6	C1500

#### Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 47 MSE= 0.000016 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 5.245902

Number of Means 2 3 4 5 6 7 8 Critical Range .004947 .005203 .005371 .005492 .005585 .005660 .005720

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	DOSE
	A	0.012100	5	B-NoTop
В	A A	0.010025	8	B-EtOH
В В	A A	0.009100	3	B3000
В В	A A	0.008033	3	B15000
В В	A A	0.006780	15	C3000
B B		0.006460	5	С-ЕТОН
B B		0.006390	10	C-NoTop
B B		0.005217	6	C1500

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: FLOWCV

Ty = " -

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 47 MSE= 0.000016
Critical Value of Studentized Range= 4.485
Minimum Significant Difference= 0.0078
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 5.245902

Means with the same letter are not significantly different.

Tukey Grouping	Mean	N	DOSE
A	0.012100	5	В-ИоТор
A A	0.010025	8	B-EtOH
A A	0.009100	3	B3000
A A	0.008033	3	B15000
A A	0.006780	15	C3000
A A	0.006460	5	С-ЕТОН
A A	0.006390	10	С-ИоТор
A A	0.005217	6	C1500

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
SITE	2	Battelle CPTC
FLOWCV	49	0.004 0.005 0.006 0.007 0.008 0.009 0.0023 0.0025 0.0026 0.0027 0.0029 0.0038 0.0039 0.0044 0.0045 0.0047 0.0048 0.0049 0.0051 0.0053 0.0054 0.0056 0.0057 0.0061 0.0062 0.0063 0.0065 0.0068 0.0069 0.0073 0.0079 0.0082 0.0083 0.0084 0.0086 0.0088 0.0094 0.0095 0.0099 0.0101 0.0102 0.0115 0.0121 0.0132 0.0137 0.0139 0.0176 0.0199 0.0232

Number of observations in data set = 55

#### Analysis of Variance Procedure

	R-Square	c.V.	Root MSE	FLC	WCV Mean
Corrected Total	54	0.00096619			
Frror	53	0.00079188	0.00001494		
Model	1	0.00017431	0.00017431	11.67	0.0012
Source	DF	Squares	Square	F Value	Pr > F
Dependent Variabl	e: FLOWCV	Sum of	Mean		

0.0076600 50.46176 0.0038654 0.180414 Mean Square F Value Pr > FAnova SS DF 0.0012 0.00017431 0.00017431 11.67

Analysis of Variance Procedure

1

T tests (LSD) for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

> Alpha= 0.05 df= 53 MSE= 0.000015 Critical Value of T= 2.01 Least Significant Difference= 0.0022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
A	0.010111	19	Battelle
В	0.006367	36	CPTC

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

> Alpha= 0.05 df= 53 MSE= 0.000015 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

> > Number of Means Critical Range .002198

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.010111	19	Battelle
В	0.006367	36	CPTC

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: FLOWCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 53 MSE= 0.000015 Critical Value of Studentized Range= 2.837 Minimum Significant Difference= 0.0022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

Means with the same letter are not significantly different.

Tukey Gro	uping		Mea	n	N	SITE
	A		0.01011	1 :	19	Battelle
	В		0.00636	7 :	36	CPTC
OBS D	OSE S	SITE	I	PPSF	FL	OWCV
1 C-1 2 C-1 3 C-1 3 C-1 4 C-1 5 C-1 6 C-1 7 C-1 8 C-1 10 C-1 11 C-1 12 C-1 13 C-1 14 C-1 15 C-1 16 C3 17 C3 18 C3 19 C3 20 C3 21 C3 22 C3 23 C3 24 C3 25 C3 26 C3 27 C3 28 C3 27 C3 28 C3 27 C3 28 C3 29 C3 30 C3 31 C1 32 C1 33 C1 34 C1 35 C1 36 C1	NoTop NoTop NoTop NoTop NoTop NoTop NoTop NoTop NoTop NoTop ETOH ETOH ETOH ETOH 000 000 000 000 000 000 000 000 000 0	SITE  SITE  CPTC  CPTC		PP 5635 1377 1378 1377 1378 1377 1378 1377 1378 1377 1378 1377 1378 1377 1378 1377 1378 1377 1378 1378		OWCV 0065 0039 0137 0038 0048 0057 0029 0088 0084 0054 0040 0086 0041 0015 0090 0061 0027 0176 0060 0068 0070 0023 0080 0062 0049 0026 0047 0063 0025 0039 00457 0063 0025 0039 00457 0063 00139
39 B-	NoTop	Battel Battel	.le	2522 2547	0.	0115
41 B-	NoTop	Battel Battel Battel	.le	2549 2553 2530	0.	0199 0069 0099

43	B-EtOH	Battelle	2531	0.0056
44	B-EtOH	Battelle	2533	0.0082
45	B-EtOH	Battelle	2540	0.0053
46	B-EtOH	Battelle	2545	0.0053
47	B-EtOH	Battelle	2546	0.0232
48	B-EtOH	Battelle	2548	0.0132
49	B-EtOH	Battelle	2550	0.0095
50	B3000	Battelle	2524	0.0121
51	B3000	Battelle	2525	0.0079
52	B3000	Battelle	2527	0.0073
53	B15000	Battelle	2536	0.0090
54	B15000	Battelle	2541	0.0050
55	B15000	Battelle	2544	0.0101

## APPENDIX A(2a) Vascular Resistance Coefficient of Variance

The SAS System
15:19 Wednesday, August 2, 1995

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
VRCV	58	0.01 0.08 0.019 0.034 0.039 0.049 0.058 0.0121 0.0125 0.0149 0.0159 0.0195 0.0216 0.0223 0.0227 0.0235 0.0238 0.0245 0.0257 0.0268 0.0287 0.0315 0.0348 0.0373 0.0394 0.0412 0.0424 0.0427 0.0466 0.0508 0.0522 0.0529 0.0532 0.0546 0.0551 0.0596 0.0602 0.0608 0.0618 0.0621 0.0638 0.0639 0.0678 0.0702 0.0727 0.0734 0.0736 0.0752 0.0798 0.0835 0.0847 0.0851 0.0861 0.0911 0.1058 0.1062 0.1288 0.1733

Number of observations in data set = 58

#### Analysis of Variance Procedure

Dependent V	ariable: VRCV				
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
( Model	7	0.02930531	0.00418647	8.00	0.0001
Error	50	0.02616552	0.00052331		
Corrected T	otal 57	0.05547083			
	R-Square	c.v.	Root MSE		VRCV Mean
	0.528301	42.69417	0.0228760		0.0535810
Source	DF	Anova SS	Mean Square	F Value	Pr > F
DOSE	7	0.02930531	0.00418647	8.00	0.0001

Analysis of Variance Procedure

Vascular Resistance Coefficient of Variance

T tests (LSD) for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.000523 Critical Value of T= 2.01 Least Significant Difference= 0.0263 WARNING: Cell sizes are not equal.

Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

T Gro	uping	Mean	N	DOSE
	A	0.08413	15	C3000
В	A A	0.06750	6	C1500
B B		0.05758	10	C-NoTop
B B	C	0.04728	5	С-ЕТОН
	C C	0.02998	8	B-EtOH
	C C	0.02846	5	B-NoTop
	C C	0.02783	4	B3000
	C C	0.02704	5	B15000

#### Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.000523 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .02628 .02764 .02853 .02918 .02968 .03008 .03040

Means with the same letter are not significantly different.

Duncan Gro	uping		Mean	N	DOSE
	A		0.08413	15	C3000
В	A A		0.06750	6	C1500
B B	A A	C	0.05758	10	C-NoTop
B B	D	C C	0.04728	5	С-ЕТОН
	D D	C C	0.02998	8	B-EtOH
	D D		0.02846	5	B-NoTop
	D D		0.02783	4	B3000
	D D		0.02704	5	B15000

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.000523 Critical Value of Studentized Range= 4.473 Minimum Significant Difference= 0.0414 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Grou	ıping	Mean	N	DOSE
	A A	0.08413	15	C3000
B B	A A	0.06750	6	C1500
В	A	0.05758	10	C-NoTop
B B	A A	0.04728	5	С-ЕТОН
B B		0.02998	8	B-EtOH
В В		0.02846	5	B-NoTop
В В		0.02783	4	B3000
B B		0.02704	5	B15000

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
SITE	2	Battelle CPTC
VRCV	58	0.01 0.08 0.019 0.034 0.039 0.049 0.058 0.0121 0.0125 0.0149 0.0159 0.0195 0.0216 0.0223 0.0227 0.0235 0.0238 0.0245 0.0257 0.0268 0.0287 0.0315 0.0348 0.0373 0.0394 0.0412 0.0424 0.0427 0.0466 0.0508 0.0522 0.0529 0.0532 0.0546 0.0551 0.0596 0.0602 0.0608 0.0618 0.0621 0.0638 0.0639 0.0678 0.0702 0.0727 0.0734 0.0736 0.0752 0.0798 0.0835 0.0847 0.0851 0.0861 0.0911 0.1058 0.1062 0.1288 0.1733

Number of observations in data set = 58

#### Analysis of Variance Procedure

Dependent Varial	ole: VRCV				
Cource	DF	Sum of Squares	Mean Sguare	F Value	Pr > F
Model	1	0.02216750	0.02216750	37.27	0.0001
Error	56	0.03330333	0.00059470		

Corrected Total	57	0.05547083			
A .	R-Square	c.v.	Root MSE		VRCV Mean
	0.399625	45.51334	0.0243865		0.0535810
Source	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	0.02216750	0.02216750	37.27	0.0001

Analysis of Variance Procedure

T tests (LSD) for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 56 MSE= 0.000595 Critical Value of T= 2.00 Least Significant Difference= 0.0132 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
A	0.068864	36	CPTC
В	0.028573	22	Battelle

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 56 MSE= 0.000595 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Number of Means 2 Critical Range .01322

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.068864	36	CPTC
В	0.028573	22	Battelle

Analysis of Variance Procedure

. . . . .

Tukey's Studentized Range (HSD) Test for variable: VRCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 56 MSE= 0.000595 Critical Value of Studentized Range= 2.833 Minimum Significant Difference= 0.0132 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A		0.068864	36	CPTC
	В		0.028573	22	Battelle
OBS	DOSE	SITE	IPPSF		VRCV
OBS 1234567890112131456718921223425678903132	C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NOTOP C-ETOH C-ETOH C-ETOH C-ETOH C3000	CPTC CPTC CPTC CPTC CPTC CPTC CPTC CPTC	563 565 1246 1374 1375 1376 1377 1378 2082		.0639 .0466 .0621 .0911 .0752 .0678 .0546 .0800 .0100 .0245 .0427 .0508 .0596 .0195 .0638 .0580 .0618 .0734 .0424 .1288 .0602 .0727 .0798 .1058 .0847 .0736 .0861 .0736 .0861 .0733 .0702 .0702
33 34 35 36 37	C1500 C1500 C1500 C1500 B-NoTop	CPTC CPTC CPTC CPTC Batte Batte		0 0 0	0.0835 0.0851 0.0608 0.0532 0.0125
38	B-NoTop	Datte	TTE 7277		,. 0221

39	B-NoTop	Battelle	2547	0.0390
40	B-NoTop	Battelle	2549	0.0394
41	B-NoTop	Battelle	2553	0.0287
42	B-EtOH	Battelle	2530	0.0348
43	B-EtOH	Battelle	2531	0.0315
44	B-EtOH	Battelle	2533	0.0223
45	B-EtOH	Battelle	2540	0.0238
46	B-EtOH	Battelle	2545	0.0412
47	B-EtOH	Battelle	2546	0.0373
48	B-EtOH	Battelle	2548	0.0340
49	B-EtOH	Battelle	2550	0.0149
50	B3000	Battelle	2524	0.0529
51	B3000	Battelle	2525	0.0190
52	B3000	Battelle	2527	0.0159
53	B3000	Battelle	2534	0.0235
54	B15000	Battelle	2536	0.0121
55	B15000	Battelle	2541	0.0257
56	B15000	Battelle	2542	0.0268
57	B15000	Battelle	2543	0.0216
58	B15000	Battelle	2544	0.0490

# APPENDIX A(2b) Vascular Resistance Regression R-Square Measure

The SAS System
13:23 Thursday, August 3, 1995

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NOTOP B15000 B3000 C-ETOH C-NoTop C1500 C3000
VRR2	52	0 1 0.11 0.56 0.89 0.003 0.006 0.007 0.027 0.032 0.046 0.067 0.091 0.112 0.144 0.203 0.237 0.242 0.319 0.406 0.437 0.459 0.479 0.516 0.534 0.538 0.578 0.584 0.651 0.738 0.745 0.751 0.768 0.786 0.791 0.815 0.818 0.832 0.836 0.841 0.855 0.863 0.866 0.871 0.872 0.884 0.905 0.919 0.944 0.945 0.953 0.954

Number of observations in data set = 58

#### Analysis of Variance Procedure

Variable: VRR2	Sum of	Mean		
DF	Squares	Square	F Value	Pr > F
7	1.95930045	0.27990006	2.87	0.0133
50	4.86857618	0.09737152		
Total 57	6.82787662			
R-Square	c.v.	Root MSE		VRR2 Mean
R-Square 0.286956	C.V. 55.40149	Root MSE 0.3120441		VRR2 Mean 0.5632414
-				
-			F Value	
	DF 7 50	Sum of Squares 7 1.95930045 50 4.86857618	Sum of Mean Square Square 7 1.95930045 0.27990006 50 4.86857618 0.09737152	Sum of Mean Square F Value 7 1.95930045 0.27990006 2.87 50 4.86857618 0.09737152

Analysis of Variance Procedure

Vascular Resistance Regression R-Square Measure

T tests (LSD) for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.097372 Critical Value of T= 2.01 Least Significant Difference= 0.3585 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465 Means with the same letter are not significantly different.

T Gro	uping		Mean	N	DOSE
	A		0.7898	10	С-NоТор
	A A		0.7038	5	С-ЕТОН
В	A A		0.6368	15	C3000
B B	A A		0.5995	6	C1500
B B	A A	С	0.5456	8	B-EtOH
B B	••	C C	0.3034	5	B15000
В		С			
В		C C	0.2940	4	B3000
		C	0.2088	5	B-NOTOP

#### Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.097372 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .3585 .3770 .3892 .3981 .4048 .4103 .4147

Means with the same letter are not significantly different.

Duncan Grou	ping		Mean	N	DOSE
	A		0.7898	10	C-NoTop
	A A		0.7038	5	C-ETOH
В	A A		0.6368	15	C3000
В В	A A	C	0.5995	6	C1500
B B	A A	C C	0.5456	8	B-EtOH
B B		C C	0.3034	5	B15000
B B		C C	0.2940	4	B3000
		c c	0.2088	5	B-NOTOP

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRR2

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.097372
Critical Value of Studentized Range= 4.473
Minimum Significant Difference= 0.5644
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Grou	uping	Mean	N	DOSE
	A	0.7898	10	C-NoTop
В	A A	0.7038	5	С-ЕТОН
B B	A A	0.6368	15	C3000
B B	A A	0.5995	6	C1500
В	A A	0.5456	8	B-EtOH
В В -	A			
B B	A A	0.3034	5	B15000
B B	A	0.2940	4	B3000
В		0.2088	5	B-NOTOP

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
SITE	2	Battelle CPTC
VRR2	52	0 1 0.11 0.56 0.89 0.003 0.006 0.007 0.027 0.032 0.046 0.067 0.091 0.112 0.144 0.203 0.237 0.242 0.319 0.406 0.437 0.459 0.479 0.516 0.534 0.538 0.578 0.584 0.651 0.738 0.745 0.751 0.768 0.786 0.791 0.815 0.818 0.832 0.836 0.841 0.855 0.863 0.866 0.871 0.872 0.884 0.905 0.919 0.944 0.945 0.953 0.954

Number of observations in data set = 58

#### Analysis of Variance Procedure

Dependent Variabl	e: VRR2				
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.34734170	1.34734170	13.77	0.0005
Error	56	5.48053492	0.09786669		
Corrected Total	57	6.82787662			
	R-Square	c.v.	Root MSE		VRR2 Mean

	0.197330	55.54218	0.3128365		0.5632414
S.∰rce	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	1.34734170	1.34734170	13.77	0.0005

Analysis of Variance Procedure

T tests (LSD) for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

> Alpha= 0.05 df= 56 MSE= 0.097867 Critical Value of T= 2.00 Least Significant Difference= 0.1696 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
A	0.68239	36	CPTC
В	0.36827	22	Battelle

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

> Alpha= 0.05 df= 56 MSE= 0.097867 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

> > Number of Means Critical Range .1696

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
А	0.68239	36	CPTC
В	0.36827	22	Battelle

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRR2

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 56 MSE= 0.097867 Critical Value of Studentized Range= 2.833 Minimum Significant Difference= 0.1696 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A		0.68239	36	CPTC
	В		0.36827	22	Battelle
OBS	DOSE	SITE	IPPSF		VRR2
1	C-NoTop	CPTC	563		.832
2	C-NoTop	CPTC	565		.242
3	C-NoTop	CPTC	1246		.000
4	C-NoTop	CPTC	1374		.786
5	C-NoTop	CPTC	1375		.905
6	C-NoTop	CPTC	1376		.651
7	C-NoTop	CPTC	1377		.944
8	C-NoTop	CPTC	1378		.538
9	C-NoTop	CPTC	2082		.000
10	C-NoTop	CPTC	2083		.000
11	C-ETOH	CPTC	1737		.815
12	C-ETOH	CPTC	1738		.872
13	C-ETOH	CPTC	1739		.954
14	C-ETOH	CPTC	1744		.007
15	C-ETOH	CPTC	1755		.871
16	C1500	CPTC	1741		.863
17	C1500	CPTC	1742		.112
18	C1500	CPTC	1743		.768
19	C1500	CPTC	1746		.945
20	C1500	CPTC	1748 1754		.863 .046
21	C1500	CPTC	1745		.237
22	C3000	CPTC	1745		.000
23	C3000	CPTC	1747		.578
24	C3000	CPTC CPTC	1750		.738
25	C3000	CPTC	1751		.836
26 27	C3000	CPTC	1751		.953
27 28	C3000	CPTC	1761	_	.584
28 29	C3000	CPTC	1768	_	.890
30	C3000	CPTC	1769		.791
31	C3000	CPTC	1828		.919
32	C3000	CPTC	1829		.841
33	. C3000	CPTC	1834		.866
34	C3000	CPTC	1835		.855
35	C3000	CPTC	1836		.437
36	C3000	CPTC	1837		.027
37	B-NOTOP	Battell			.144
3 <i>7</i> 38	B-NOTOP	Battell			.032
38 39	B-NOTOP	Battell			.406
40	B-NOTOP	Battell			.003
41	B-NOTOP	Battell			.459
42	B-EtOH	Battell			.751

44       B-EtOH       Battelle       2533       0.534         45       B-EtOH       Battelle       2540       0.516         46       B-EtOH       Battelle       2545       0.479         47       B-EtOH       Battelle       2546       0.319         48       B-EtOH       Battelle       2548       0.745         49       B-EtOH       Battelle       2550       0.203         50       B3000       Battelle       2524       0.738         51       B3000       Battelle       2525       0.091         52       B3000       Battelle       2527       0.237         53       B3000       Battelle       2534       0.110         54       B15000       Battelle       2536       0.006         55       B15000       Battelle       2541       0.000         56       B15000       Battelle       2542       0.560         57       B15000       Battelle       2543       0.884         58       B15000       Battelle       2544       0.067	43	B-EtOH	Battelle	2531	0.818		
## B-EtOH Battelle 2540 0.516 ## B-EtOH Battelle 2545 0.479 ## B-EtOH Battelle 2546 0.319 ## B-EtOH Battelle 2548 0.745 ## B-EtOH Battelle 2550 0.203 ## B-EtOH Battelle 2524 0.738 ## B3000 Battelle 2525 0.091 ## B3000 Battelle 2527 0.237 ## B3000 Battelle 2534 0.110 ## B15000 Battelle 2534 0.110 ## B15000 Battelle 2536 0.006 ## B15000 Battelle 2541 0.000 ## B15000 Battelle 2542 0.560 ## B15000 Battelle 2543 0.884		B-EtOH	Battelle	2533	0.534		
46       B-EtOH       Battelle       2545       0.479         47       B-EtOH       Battelle       2546       0.319         48       B-EtOH       Battelle       2548       0.745         49       B-EtOH       Battelle       2550       0.203         50       B3000       Battelle       2524       0.738         51       B3000       Battelle       2525       0.091         52       B3000       Battelle       2527       0.237         53       B3000       Battelle       2534       0.110         54       B15000       Battelle       2541       0.006         55       B15000       Battelle       2542       0.560         57       B15000       Battelle       2543       0.884		B-EtOH	Battelle	2540	0.516		
48 B-EtOH Battelle 2548 0.745 49 B-EtOH Battelle 2550 0.203 50 B3000 Battelle 2524 0.738 51 B3000 Battelle 2525 0.091 52 B3000 Battelle 2527 0.237 53 B3000 Battelle 2534 0.110 54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	46	B-EtOH	Battelle	2545	0.479		
49       B-EtOH       Battelle       2550       0.203         50       B3000       Battelle       2524       0.738         51       B3000       Battelle       2525       0.091         52       B3000       Battelle       2527       0.237         53       B3000       Battelle       2534       0.110         54       B15000       Battelle       2536       0.006         55       B15000       Battelle       2541       0.000         56       B15000       Battelle       2542       0.560         57       B15000       Battelle       2543       0.884	47	B-EtOH	Battelle	2546	0.319		
50 B3000 Battelle 2524 0.738 51 B3000 Battelle 2525 0.091 52 B3000 Battelle 2527 0.237 53 B3000 Battelle 2534 0.110 54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	48	B-EtOH	Battelle	2548	0.745		
51 B3000 Battelle 2525 0.091 52 B3000 Battelle 2527 0.237 53 B3000 Battelle 2534 0.110 54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	49	B-EtOH	Battelle	2550	0.203	•	
52 B3000 Battelle 2527 0.237 53 B3000 Battelle 2534 0.110 54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	50	B3000	Battelle	2524	0.738		
53 B3000 Battelle 2534 0.110 54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	51	B3000	Battelle	2525	0.091		
54 B15000 Battelle 2536 0.006 55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	52	B3000	Battelle	2527	0.237		
55 B15000 Battelle 2541 0.000 56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	53	B3000	Battelle	2534	0.110		
56 B15000 Battelle 2542 0.560 57 B15000 Battelle 2543 0.884	54	B15000	Battelle	2536	0.006		
57 B15000 Battelle 2543 0.884	55	B15000	Battelle	2541	0.000		
	56	B15000	Battelle	2542	0.560		
58 B15000 Battelle 2544 0.067	57	B15000	Battelle	2543	0.884		
	58	B15000	Battelle	2544	0.067		
				•			

# APPENDIX A(3) Glucose Utilization Coefficient of Variance

The SAS System
15:22 Wednesday, August 2, 1995

#### Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
GUCV	57	0.017 0.031 0.036 0.067 0.076 0.0063 0.0084 0.0091 0.0115 0.0133 0.0136 0.0139 0.0146 0.0149 0.0153 0.0158 0.0168 0.0169 0.0174 0.0175 0.0178 0.0186 0.0188 0.0197 0.0209 0.0217 0.0265 0.0279 0.0287 0.0295 0.0305 0.0313 0.0348 0.0351 0.0361 0.0368 0.0375 0.0394 0.0403 0.0416 0.0417 0.0489 0.0498 0.0566 0.0639 0.0642 0.0648 0.0727 0.0731 0.0766 0.0783 0.0813 0.0858 0.0891 0.0982 0.1146 0.1273

Number of observations in data set = 58

#### Analysis of Variance Procedure

Source	DF	Sum of	Mean		
,	Di	Squares	Square	F Value	Pr > F
Model	7	0.02866129	0.00409447	11.13	0.0001
Error	50	0.01838897	0.00036778		
Corrected 1	Total 57	0.04705025			
	R-Square	c.v.	Root MSE		GUCV Mean
	0.609163	47.74636	0.0191776		0.0401655
Source	DF	Anova SS	Mean Square	F Value	Pr > F
DOSE	7	0.02866129	0.00409447	11.13	0.0001

Analysis of Variance Procedure

Glucose Utilization Coefficient of Variance

T tests (LSD) for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.000368 Critical Value of T= 2.01 Least Significant Difference= 0.022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465 Means with the same letter are not significantly different.

T G	rouping	Mean	N	DOSE
	A	0.07562	5	в-Nотор
	A A A A A	0.06960	4	B3000
		0.06916	8	B-EtOH
		0.05674	5	B15000
	В	0.02757	6	C1500
	В В	0.02616	10	C-NoTop
	В В	0.02191	15	C3000
	B B	0.01610	5	C-ETOH

#### Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.000368 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .02203 .02317 .02392 .02446 .02488 .02521 .02549

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	DOSE
A	0.07562	5	B-NoTop
A A	0.06960	4	B3000
A A	0.06916	8	B-EtOH
A A	0.05674	5	B15000
В	0.02757	6	C1500
В В	0.02616	10	C-NoTop
· В В	0.02191	15	C3000
В В	0.01610	5	C-ETOH

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: GUCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.000368
Critical Value of Studentized Range= 4.473
Minimum Significant Difference= 0.0347
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Grou	uping	Mean	N	DOSE
	A	0.07562	5	B-NoTop
	A A	0.06960	4	B3000
	A A	0.06916	8	B-EtOH
В	A A	0.05674	5	B15000
В В	С	0.02757	6	C1500
B B	C C	0.02616	10	C-NoTop
_	C C	0.02191	15	C3000
	C	0.01610	5	С-ЕТОН
	C	0.01010	5	C-ETOII

# Analysis of Variance Procedure Class Level Information

Class	Levels	Values
SITE	2	Battelle CPTC
GUCV	57	0.017 0.031 0.036 0.067 0.076 0.0063 0.0084 0.0091 0.0115 0.0133 0.0136 0.0139 0.0146 0.0149 0.0153 0.0158 0.0168 0.0169 0.0174 0.0175 0.0178 0.0186 0.0188 0.0197 0.0209 0.0217 0.0265 0.0279 0.0287 0.0295 0.0305 0.0313 0.0348 0.0351 0.0361 0.0368 0.0375 0.0394 0.0403 0.0416 0.0417 0.0489 0.0498 0.0566 0.0639 0.0642 0.0648 0.0727 0.0731 0.0766 0.0783 0.0813 0.0858 0.0891 0.0982 0.1146 0.1273

Number of observations in data set = 58

# Analysis of Variance Procedure

Dependent Variab	le: GUCV		•		
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.02723712	0.02723712	76.98	0.0001
Frror	56	0.01981313	0.00035381		
Corrected Total	57	0.04705025			
	R-Square	c.v.	Root MSE		GUCV Mean

	0.578894	46.83054	0.0188097		0.0401655
cce	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	0.02723712	0.02723712	76.98	0.0001

Analysis of Variance Procedure

T tests (LSD) for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

> Alpha= 0.05 df= 56 MSE= 0.000354 Critical Value of T= 2.00 Least Significant Difference= 0.0102 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

SITE	N	Mean	T Grouping
Battelle	22	0.067886	А
CPTC	36	0.023225	В

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

> Alpha= 0.05 df= 56 MSE= 0.000354 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

> > Number of Means Critical Range .01020

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.067886	22	Battelle
B	0.023225	36	СРТС

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: GUCV

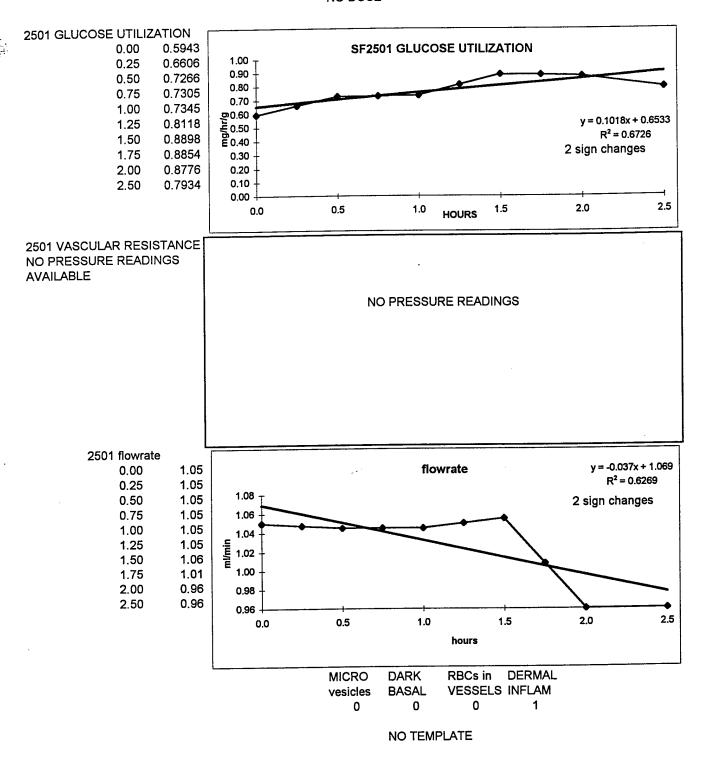
NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

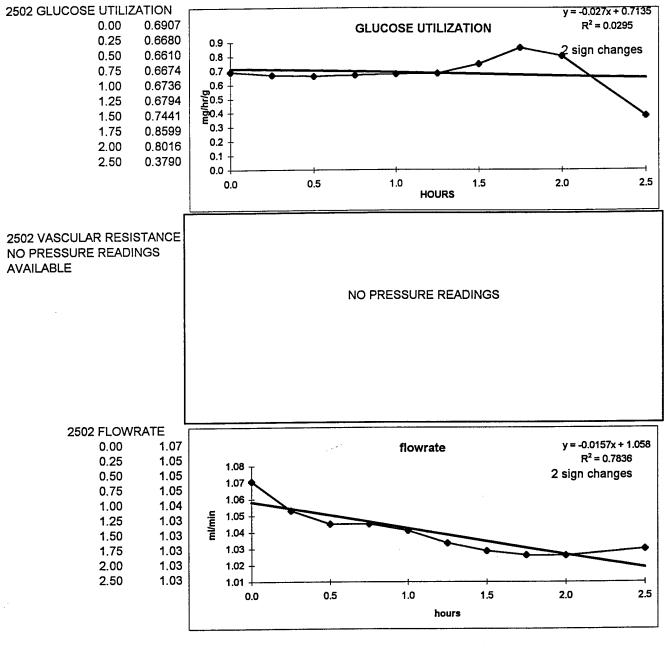
Alpha= 0.05 df= 56 MSE= 0.000354
Critical Value of Studentized Range= 2.833
Minimum Significant Difference= 0.0102
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A		0.067886	22	Battelle
	В		0.023225	36	CPTC
OBS	DOSE	SITE	IPPSF		GUCV
OBS 1234567890112314567890122345678901233456789012334567890123345678	DOSE C-NoTop C-ETOH C-ETOH C-ETOH C-ETOH C3000	SITE CPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCCPTCCCPTCCCPTCCCCPTCCCPTCCCCPTCCCCPTCCCPTCCCCCPTCCCCPTCCCCCPTCCCCCC	563 565 1246 1374 1375 1376 1377 1378 2082 2083 1737 1738 1739 1744 1755 1745 1747 1749 1750 1751 1752 1761 1768 1769 1828 1829 1834 1835 1836 1837 1741 1742 1743 1746 1748 1754 1754		GUCV .0279 .0295 .0361 .0168 .0149 .0375 .0360 .0186 .0133 .0188 .0158 .0158 .0175 .0351 .0178 .0175 .0351 .0178 .0178 .0197 .0403 .0197 .0403 .0139 .0305 .0139 .0305 .0139 .0136 .0136 .0136 .0136 .0136 .0137 .0169 .0170 .0169 .0170 .0169 .0170 .0169 .0170 .0169 .0170 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0137 .0169 .0170 .0169 .01760 .01760 .01760 .01760 .01760 .01760 .01760
39 40 41 42	B-NoTop B-NoTop B-NoTop B-EtOH	Batte Batte Batte Batte	lle 2549 lle 2553	C C	0.1273 0.0891 0.0489 0.0642

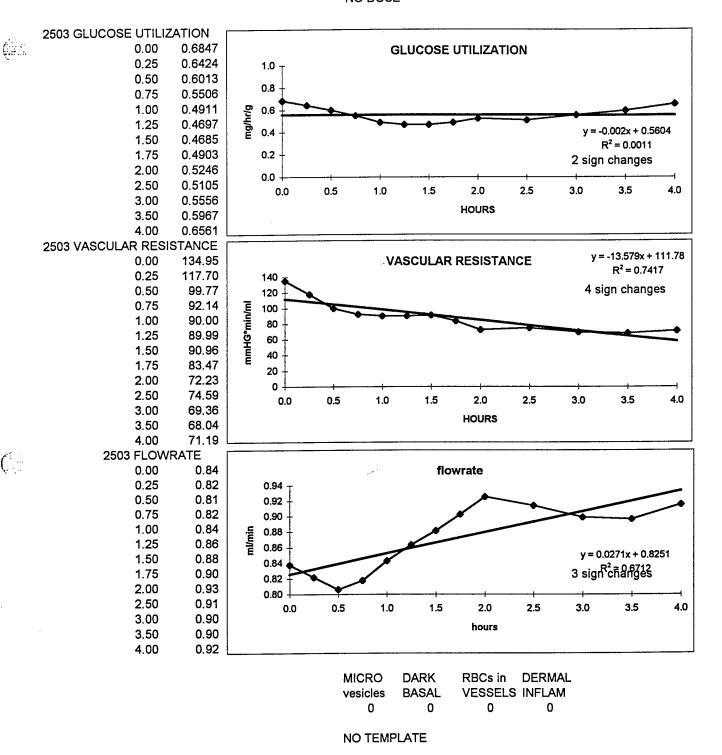
43	B-EtOH	Battelle	2531	0.1146
44	B-EtOH	Battelle	2533	0.0348
45	B-EtOH	Battelle	2540	0.0639
46	B-EtOH	Battelle	2545	0.0648
47	B-EtOH	Battelle	2546	0.0731
48	B-EtOH	Battelle	2548	0.0566
49	B-EtOH	Battelle	2550	0.0813
50	B3000	Battelle	2524	0.0783
51	B3000	Battelle	2525	0.0416
52	B3000	Battelle	2527	0.0727
53	B3000	Battelle	2534	0.0858
54	B15000	Battelle	2536	0.0174
55	B15000	Battelle	2541	0.0982
56	B15000	Battelle	2542	0.0498
57	B15000	Battelle	2543	0.0417
58	B15000	Battelle	2544	0.0766



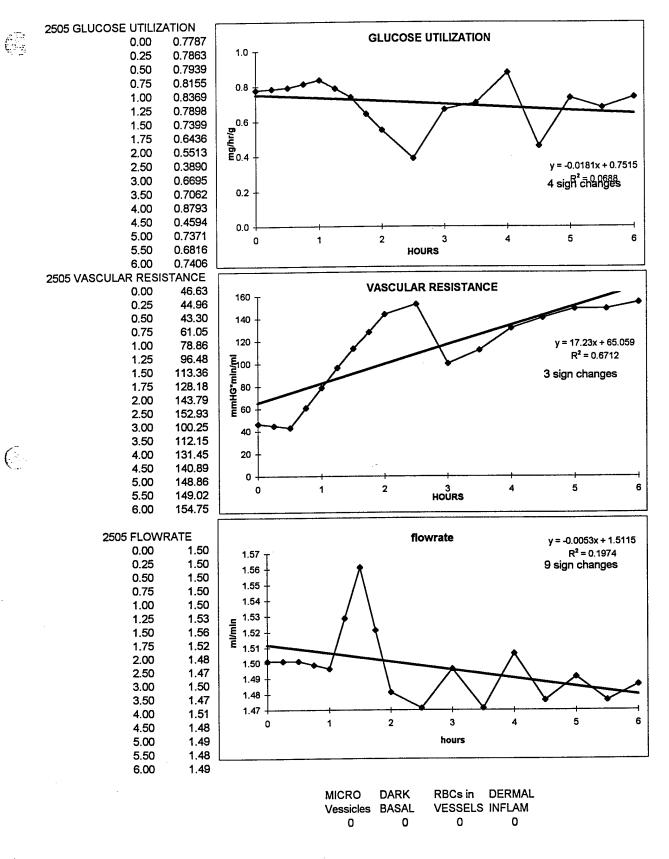


NO HISTOLOGY DATA

NO TEMPLATE

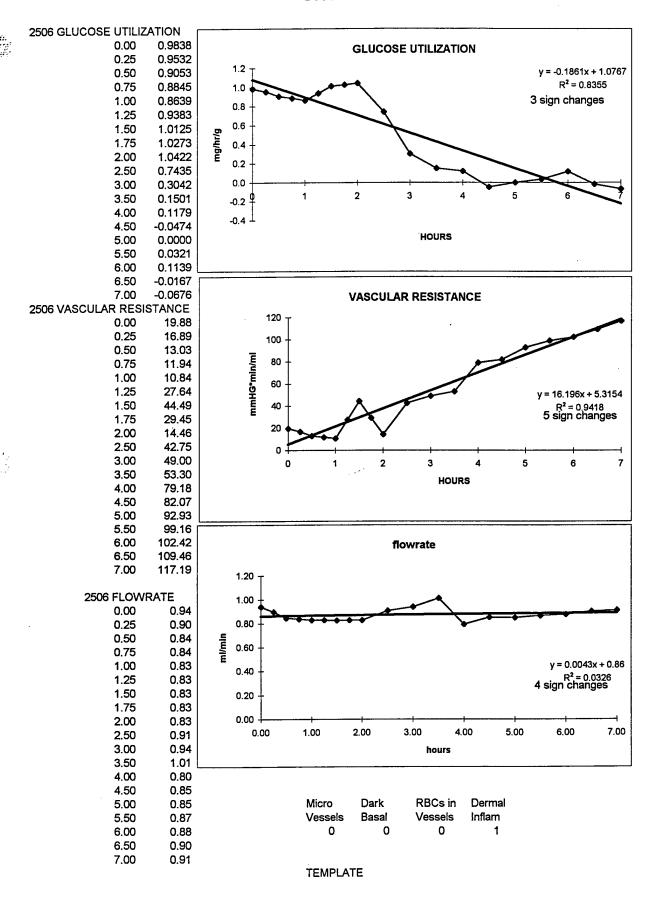


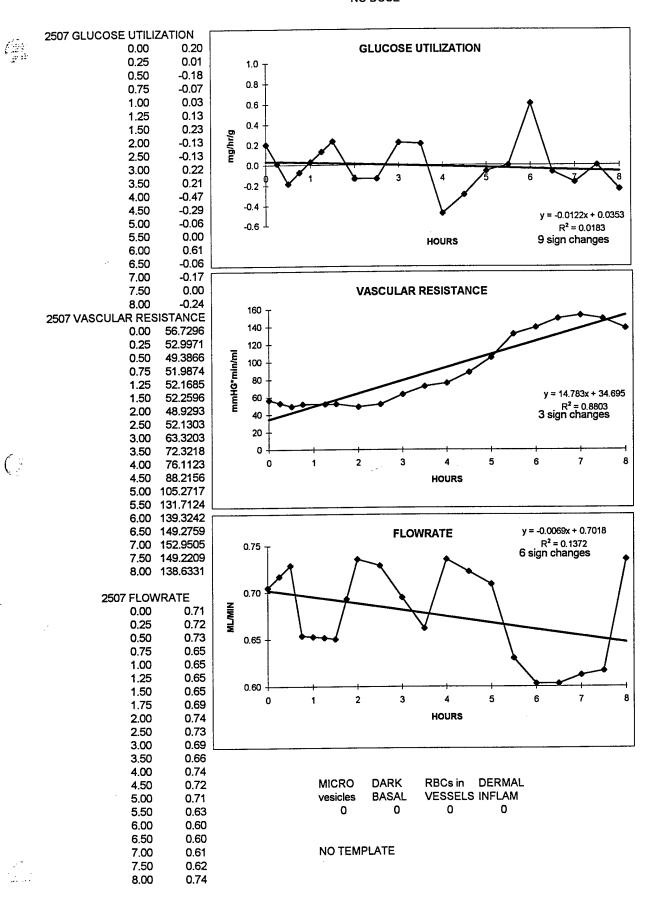
## 2505PLOT.XLS DOSE = 300 UL ETOH

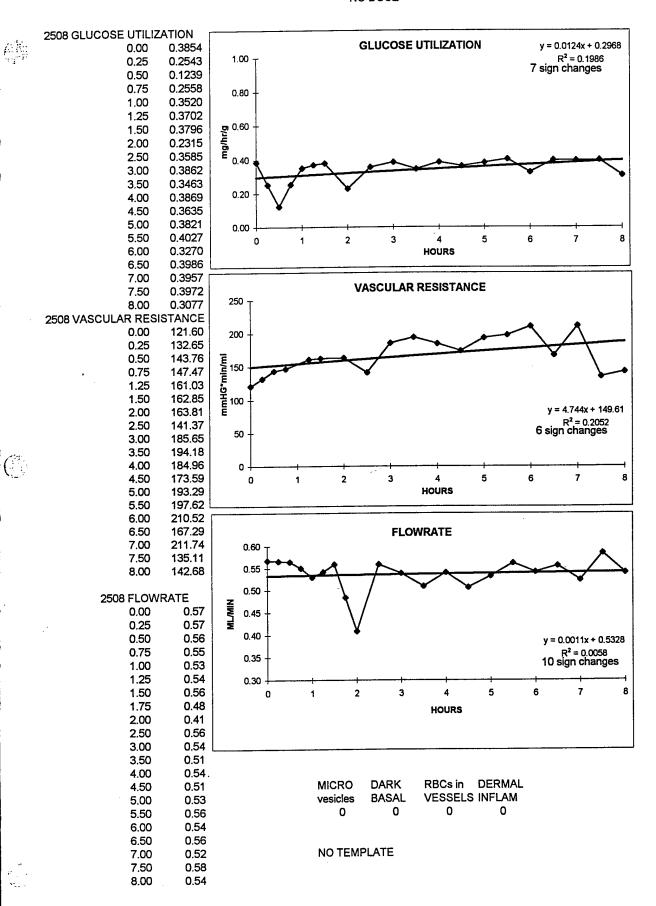


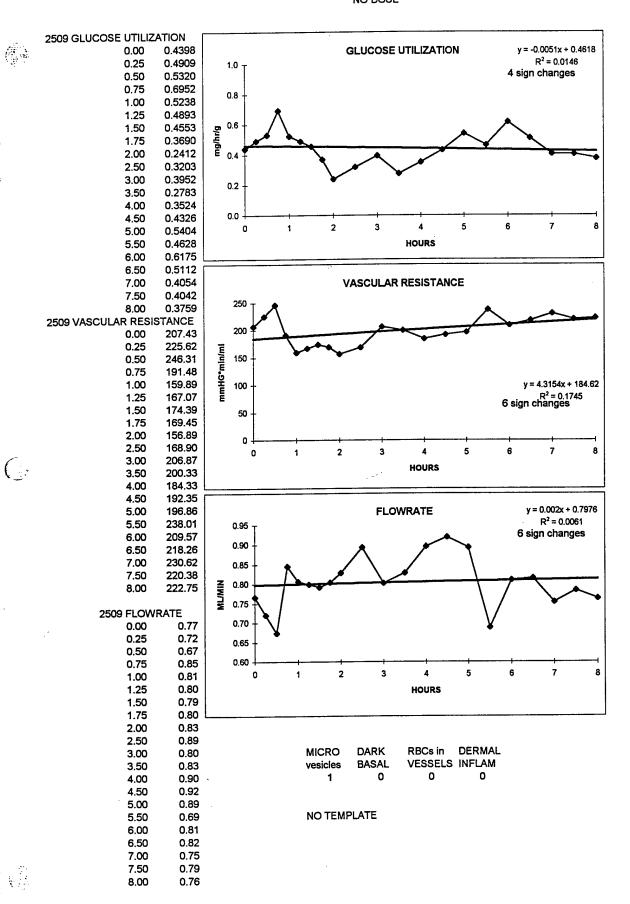
**TEMPLATE** 

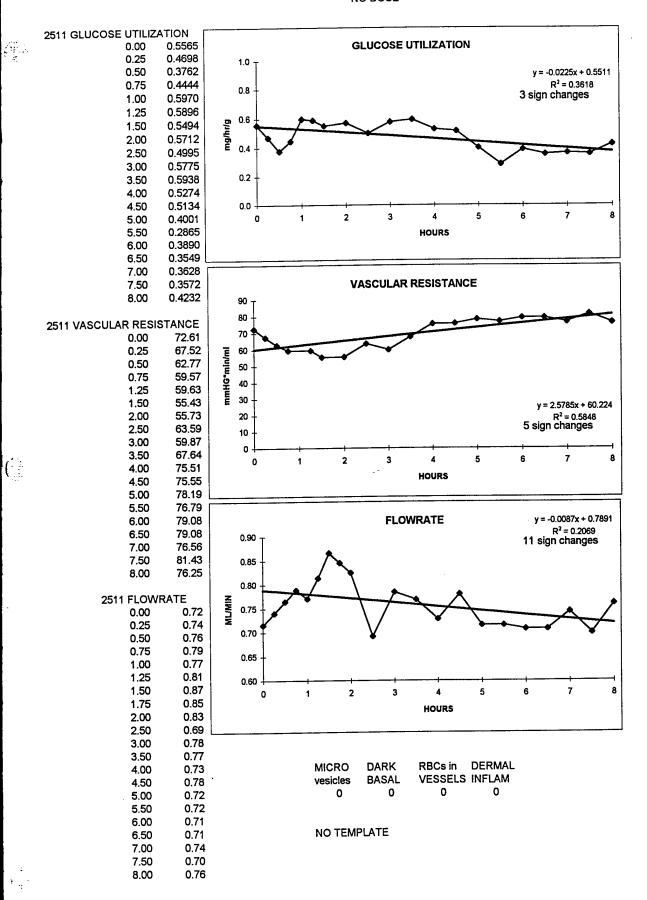
## 2506PLOT.XLS DOSE = 300 UL ETOH



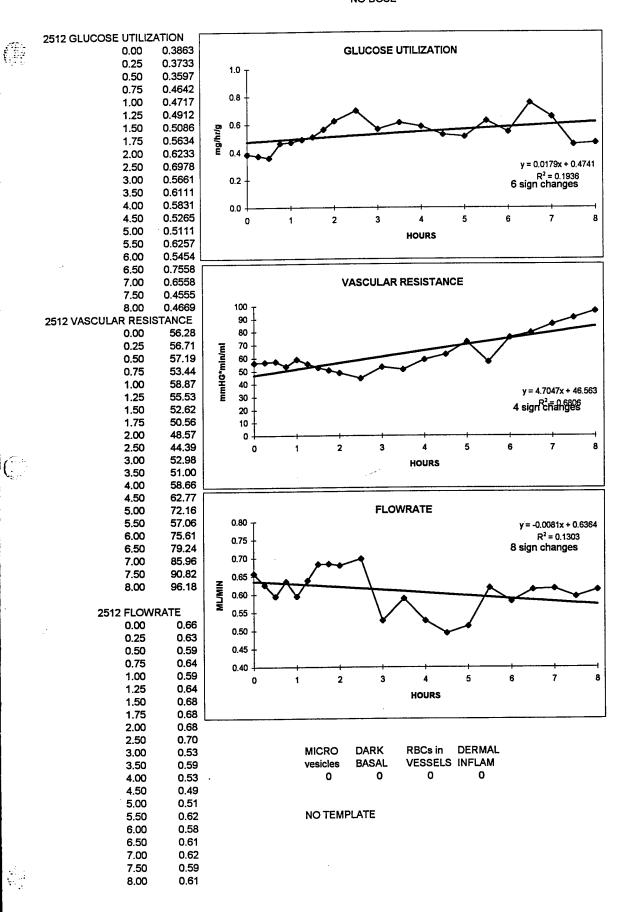


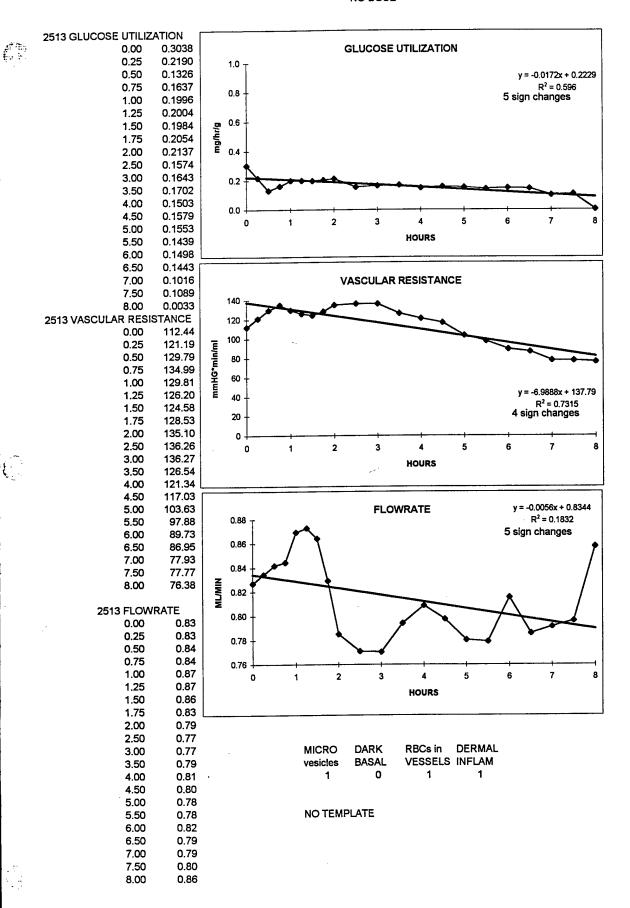




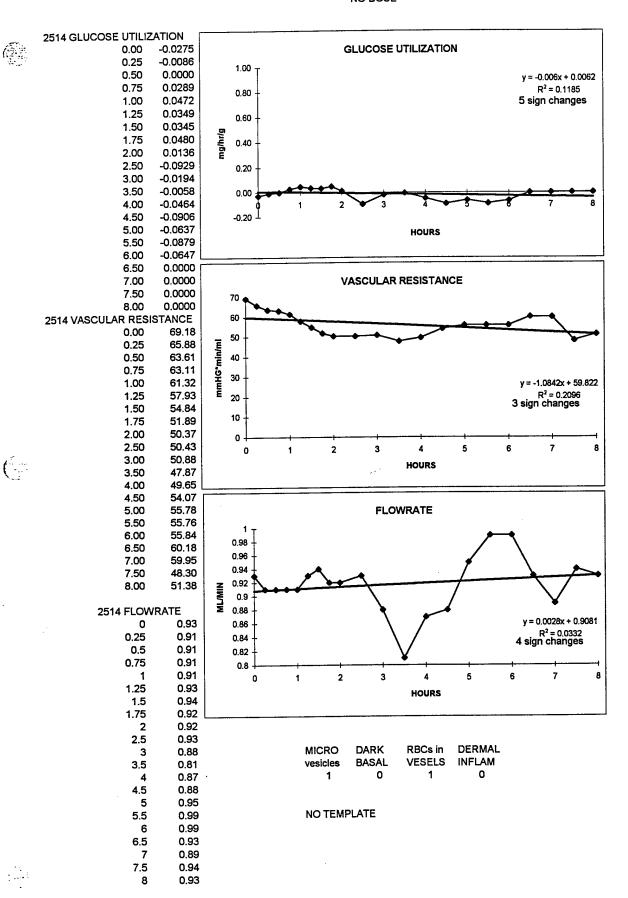


2512PLOT.XLS NO DOSE

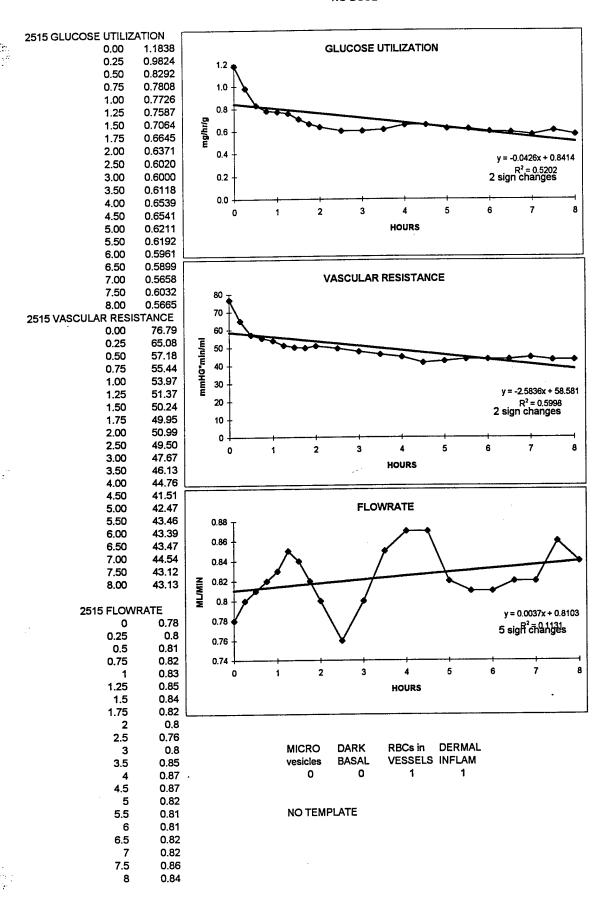


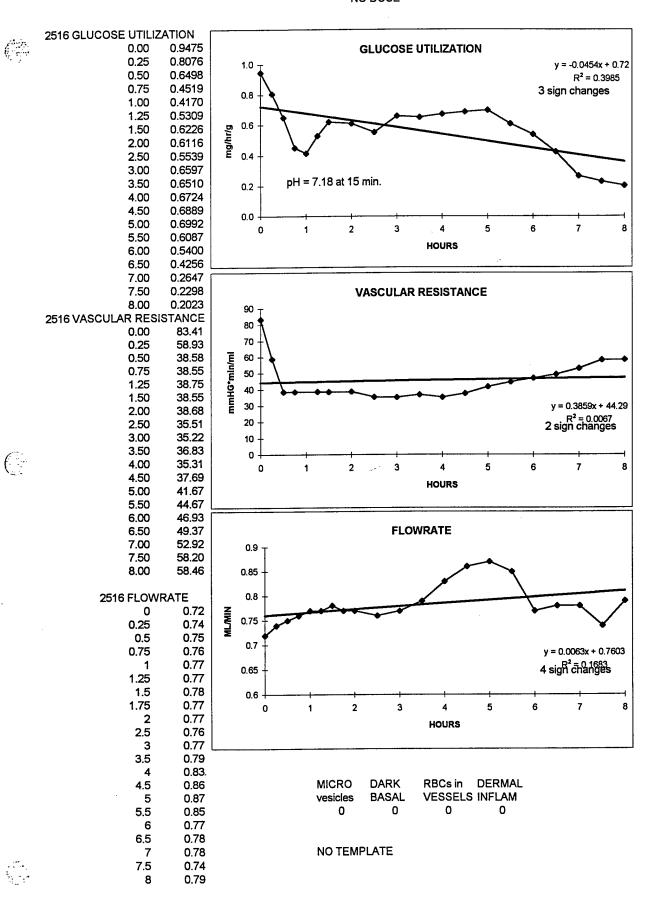


2514PLOT.XLS NO DOSE

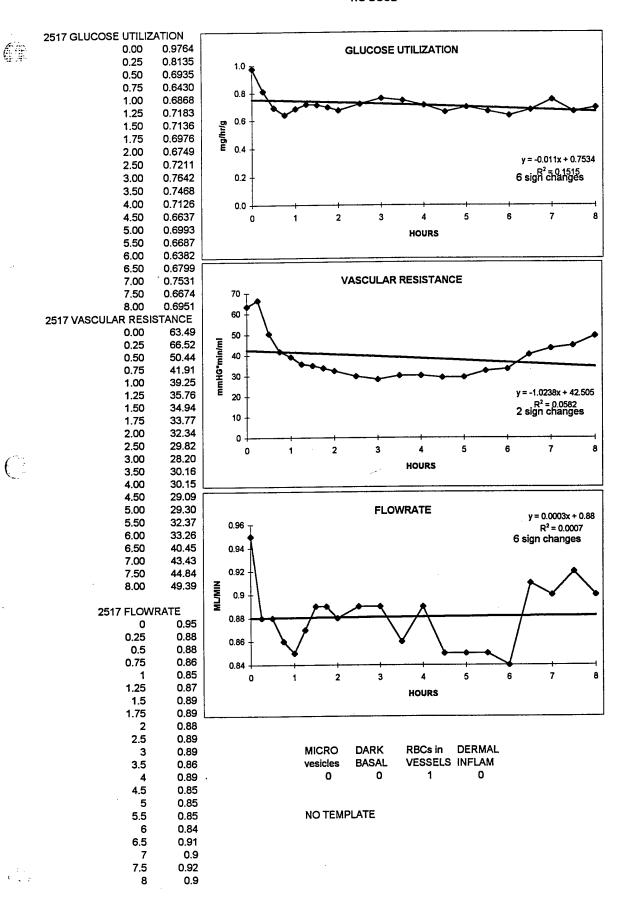


2515PLOT.XLS NO DOSE

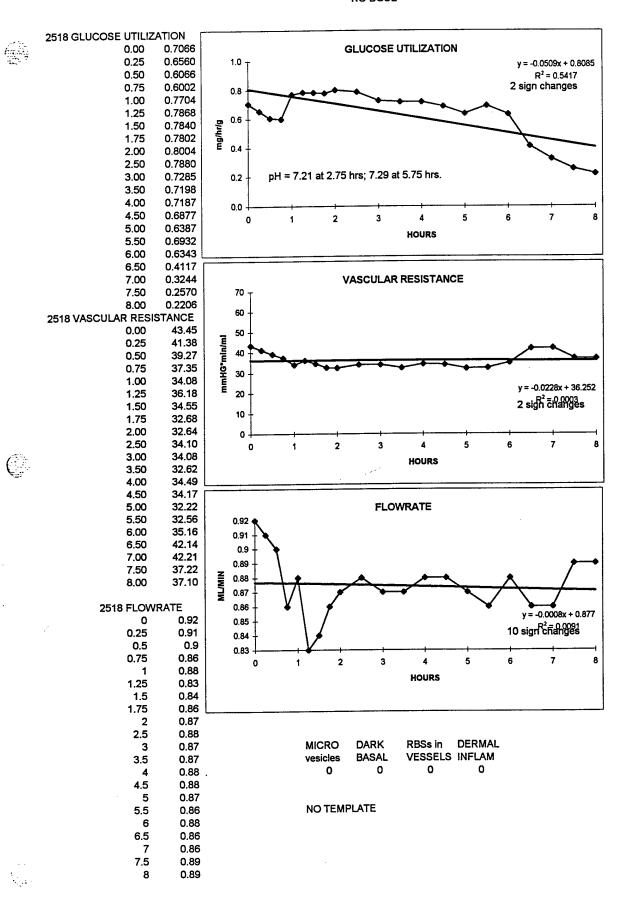




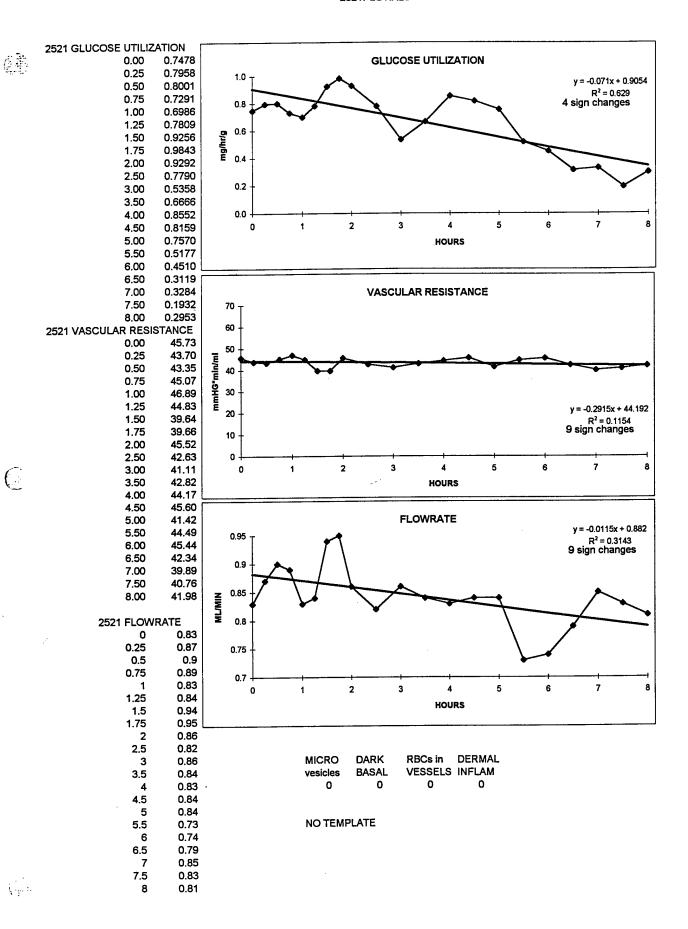
2517PLOT.XLS NO DOSE



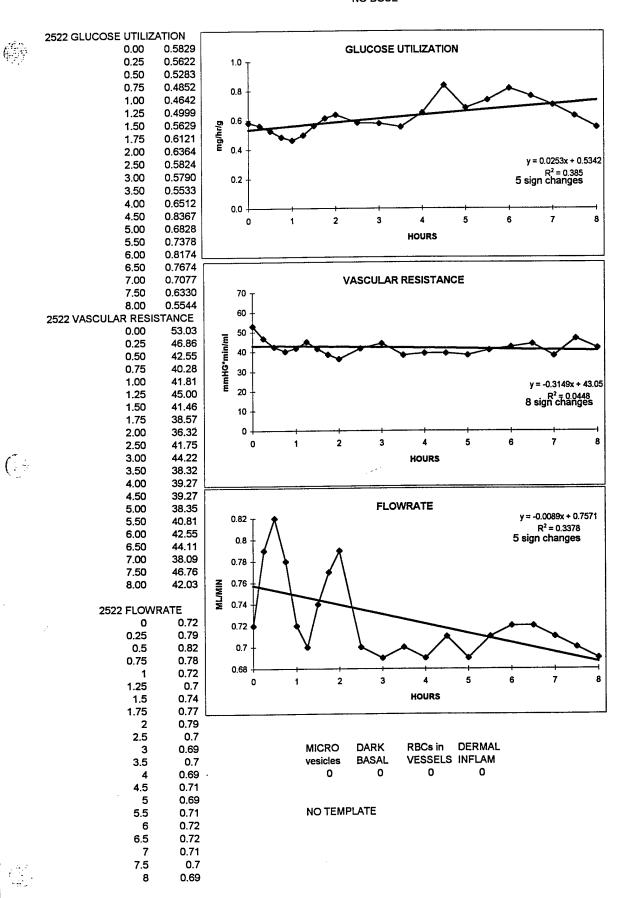
2518PLOT.XLS NO DOSE



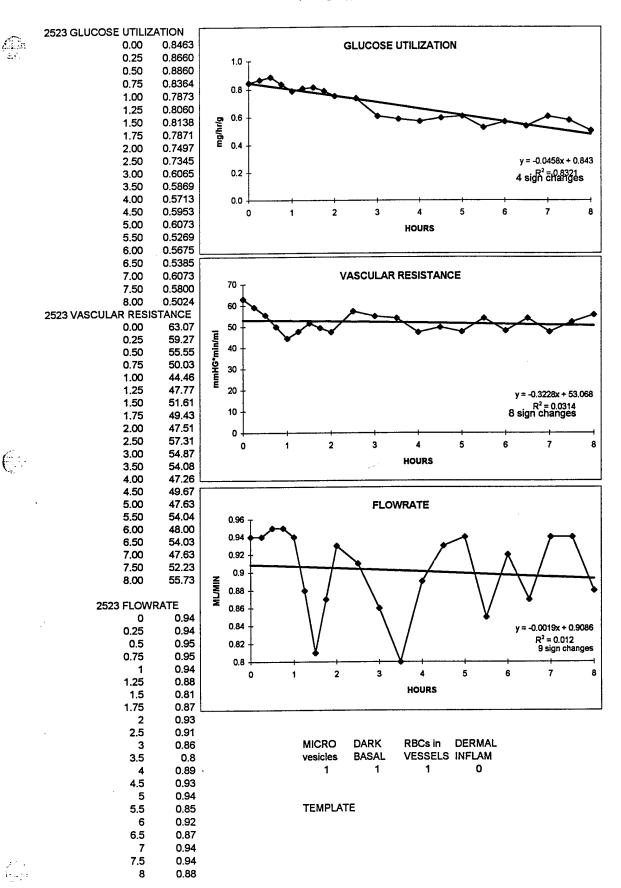
#### 2521PLOT.XLS



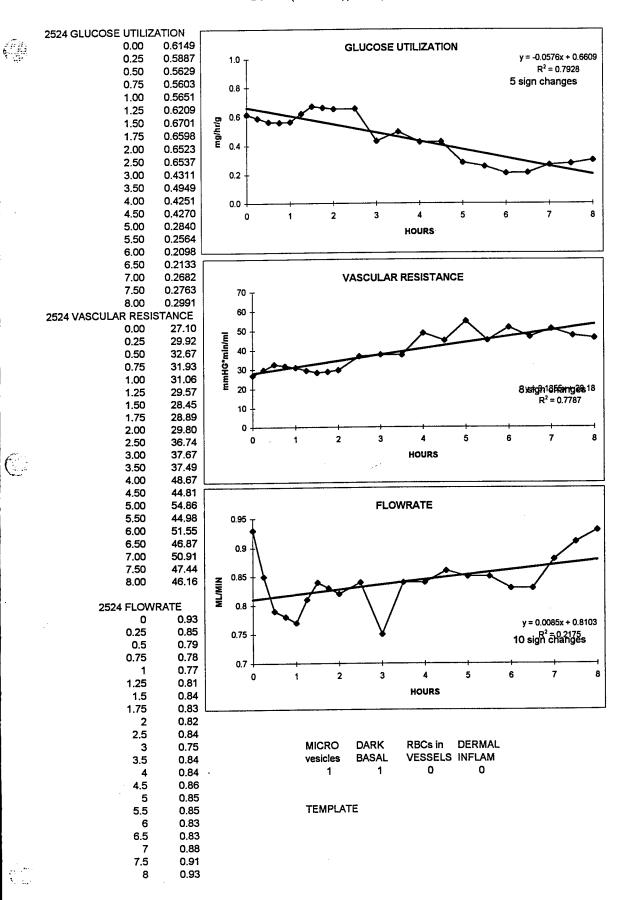
2522PLOT.XLS NO DOSE



 $2523 PLOT.XLS \\ DOSE = (1.0 \ mg/ml)(300 \ ul) = 3000 \ ug \ HD \ in \ ETOH$ 

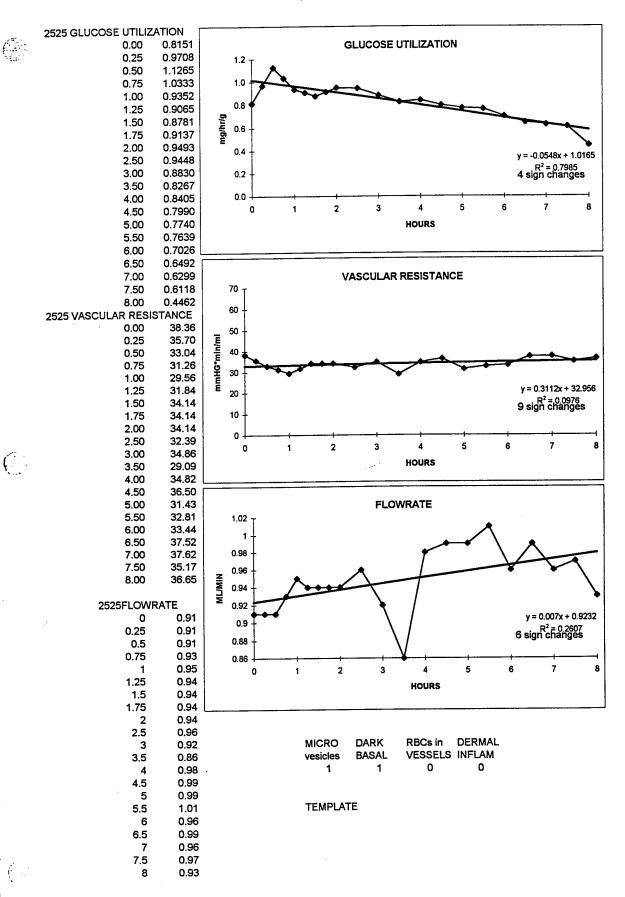


2524PLOT.XLS DOSE = (10 MG/ML)(300 UL) = 3000 UG HD IN ETOH

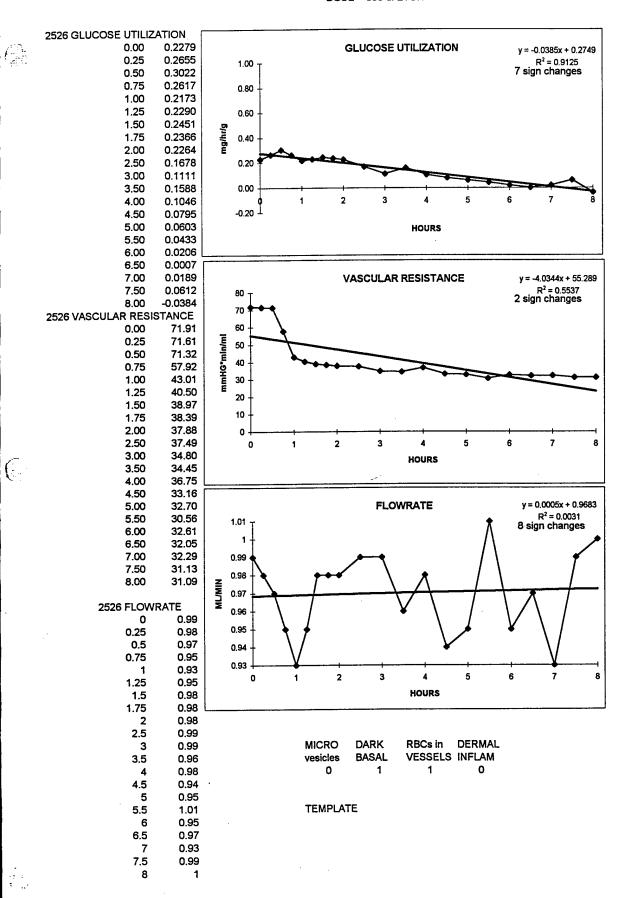


2525PLOT.XLS

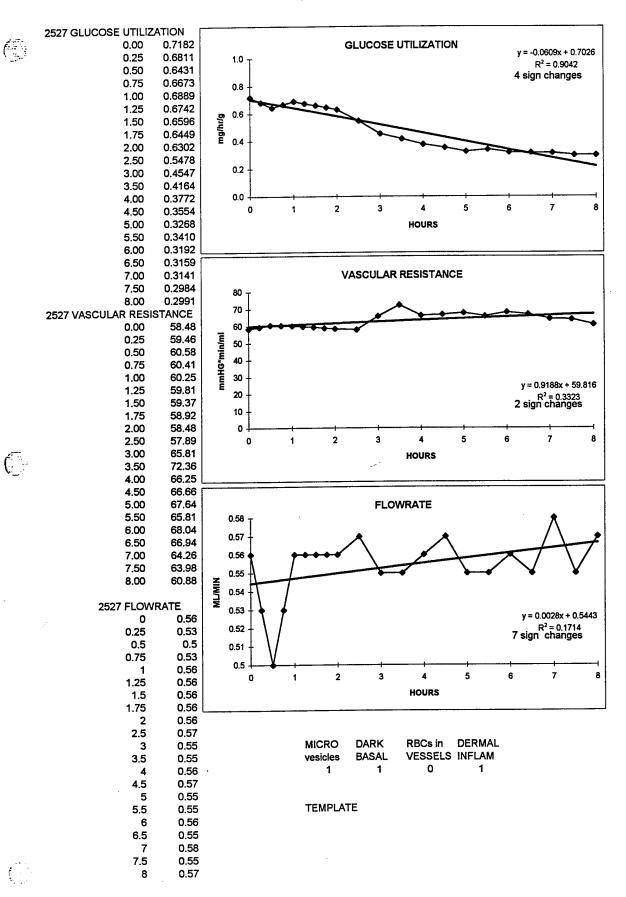
DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH



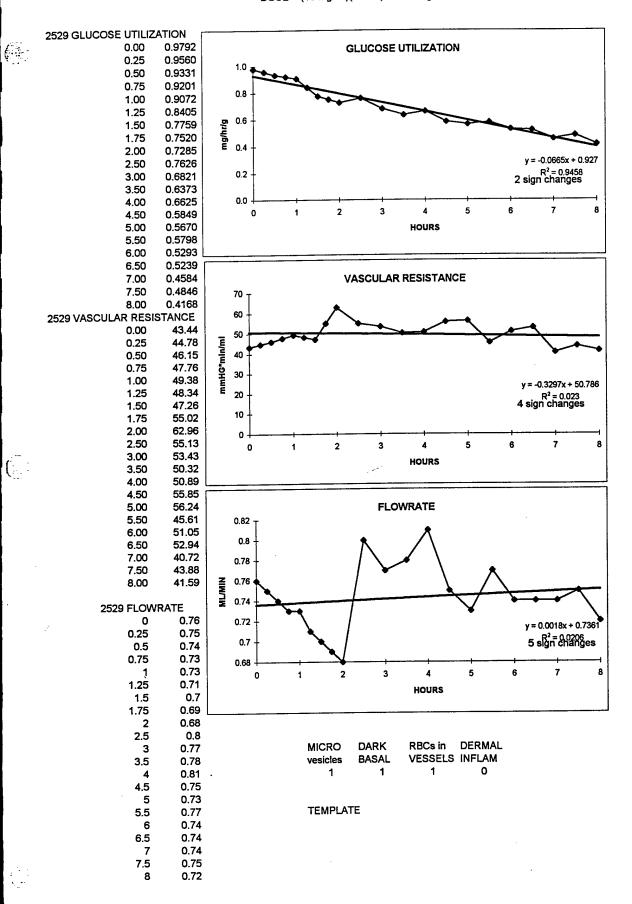
2526PLOT.XLS DOSE = 300 ul ETOH



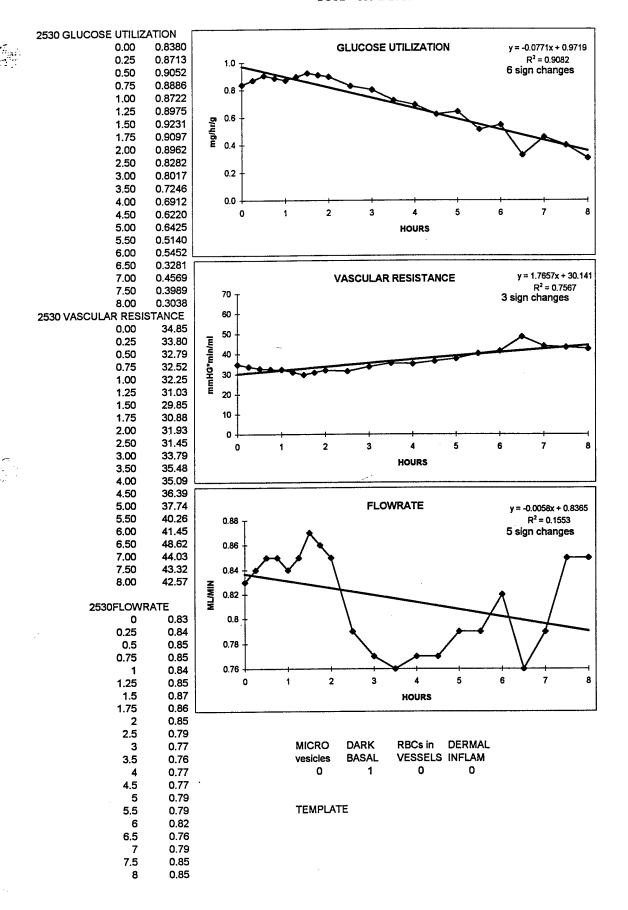
 $2527 PLOT.XLS \\ DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH$ 



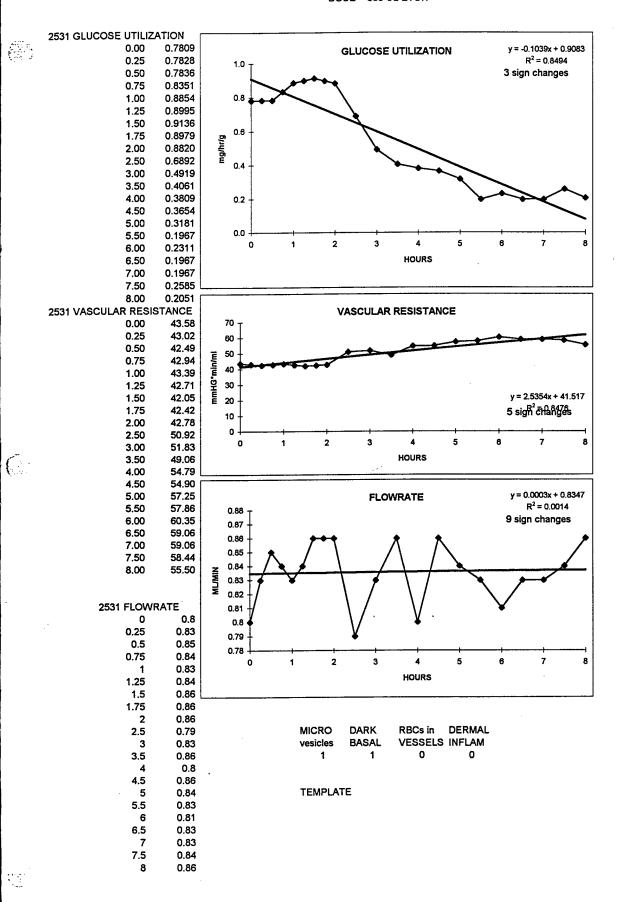
2529PLOT.XLS DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH



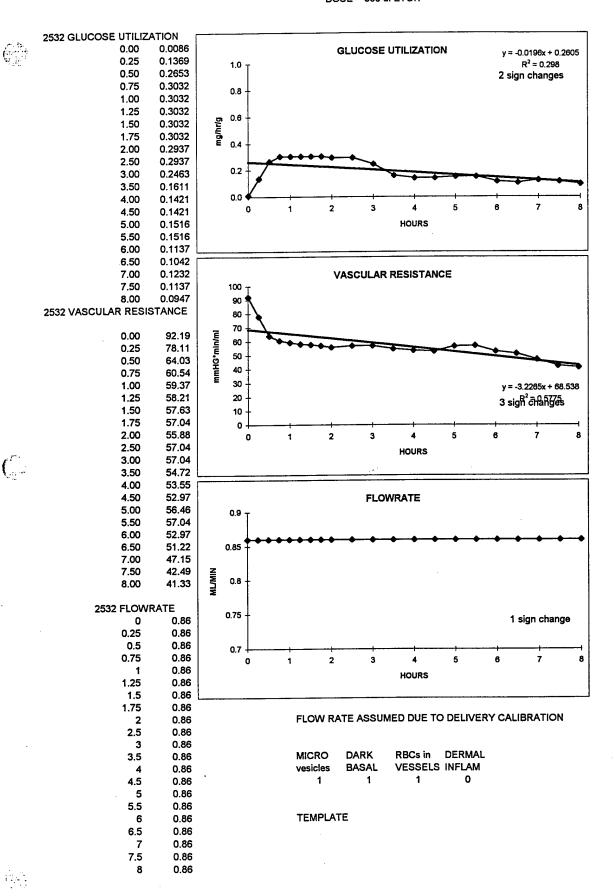
## 2530PLOT.XLS DOSE = 300 ul ETOH



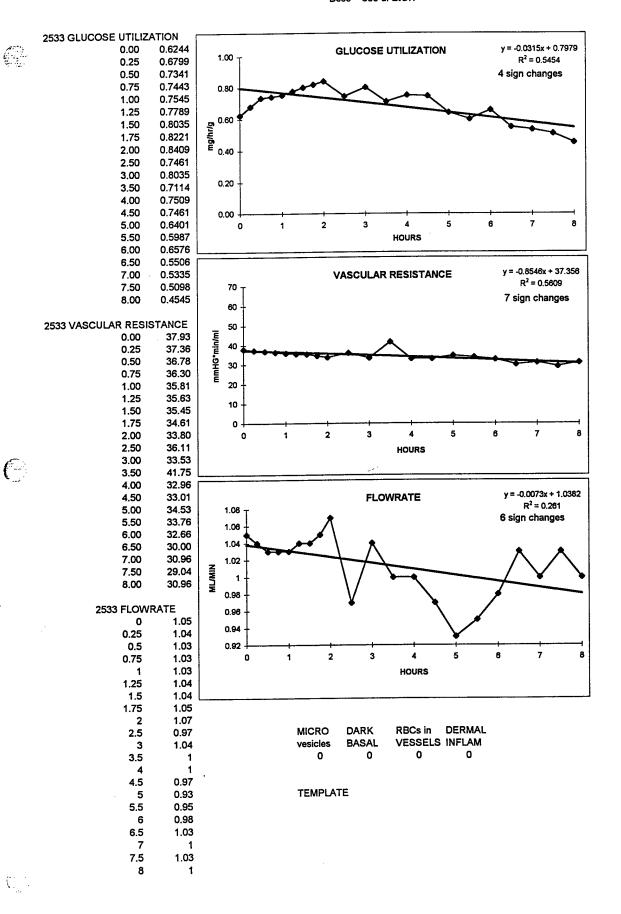
2531PLOT.XLS DOSE = 300 UL ETOH



2532PLOT.XLS DOSE = 300 ul ETOH

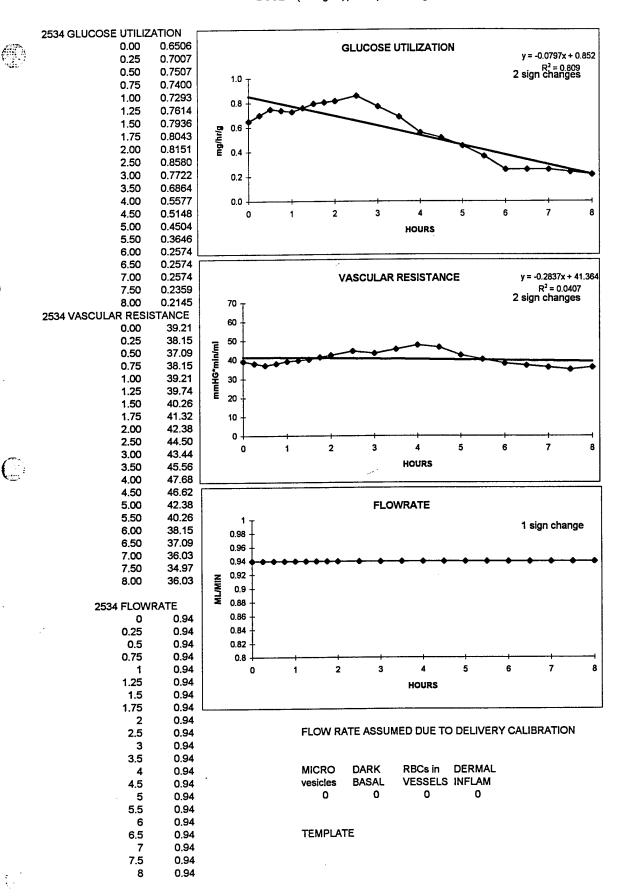


## 2533PLOT.XLS Dose = 300 ul EtOH

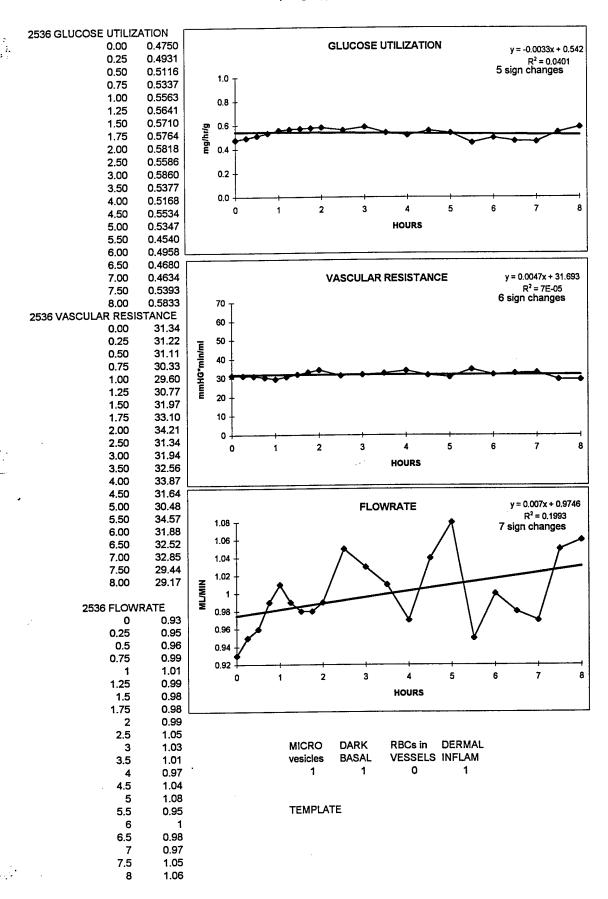


2534PLOT.XLS

DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH

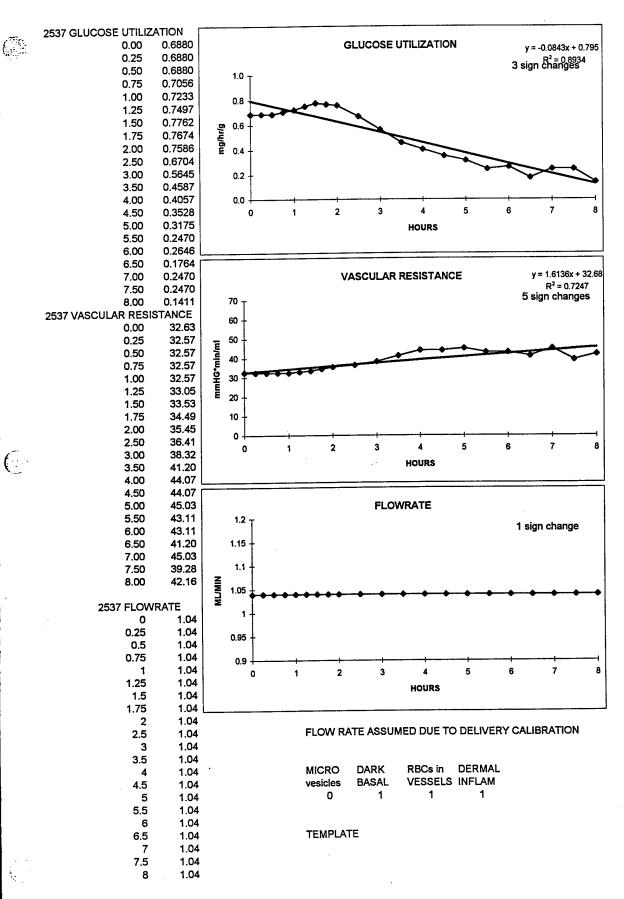


2536PLOT.XLS DOSE = (50 ug/ml)(300 UL) = 15,000 ug HD = ETOH

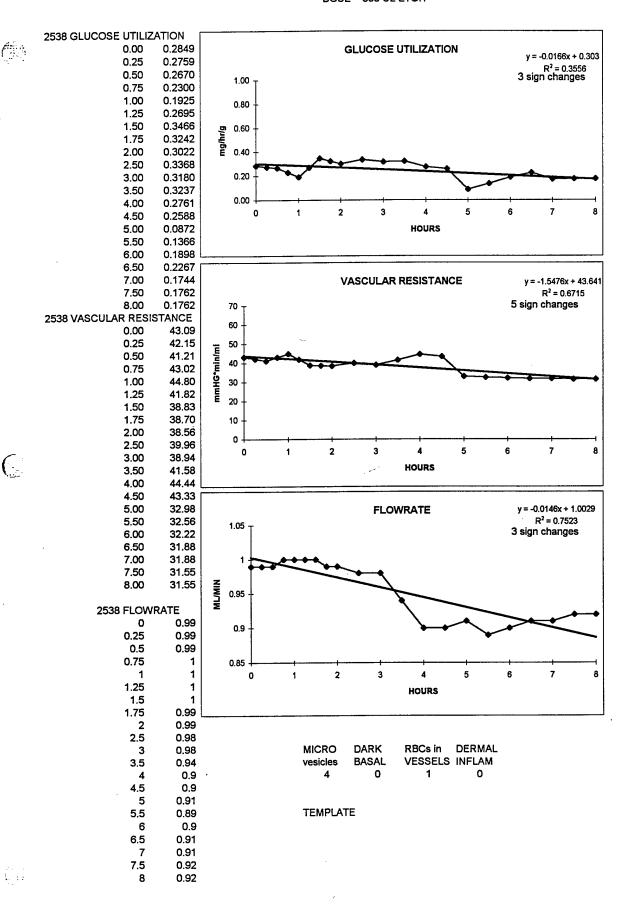


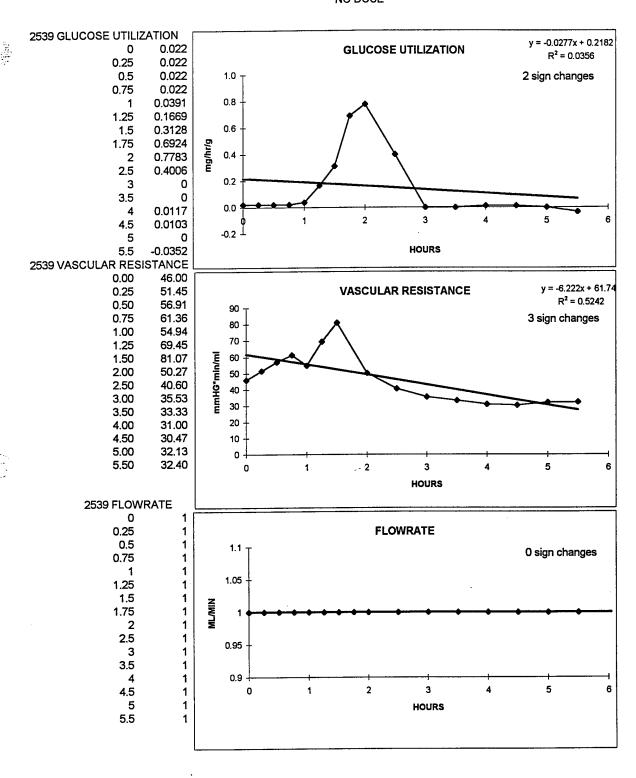
2537PLOT.XLS

DOSE = (50 mg/ml) = 15,000 ug HD in ETOH



2538PLOT.XLS DOSE = 300 UL ETOH



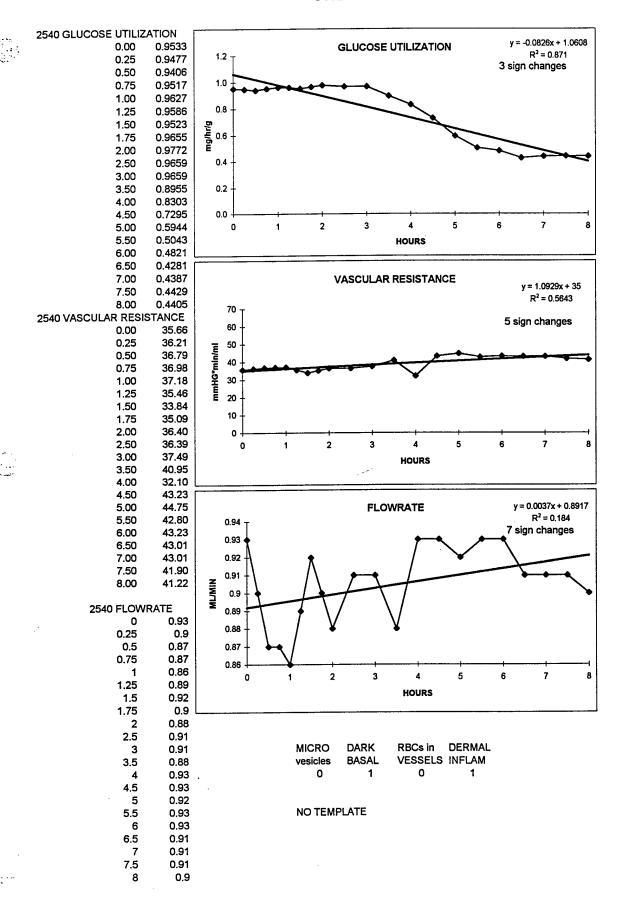


FLOW RATE ASSUMED DUE TO DELIVERY CALIBRATION FLAP ABORTED EARLY

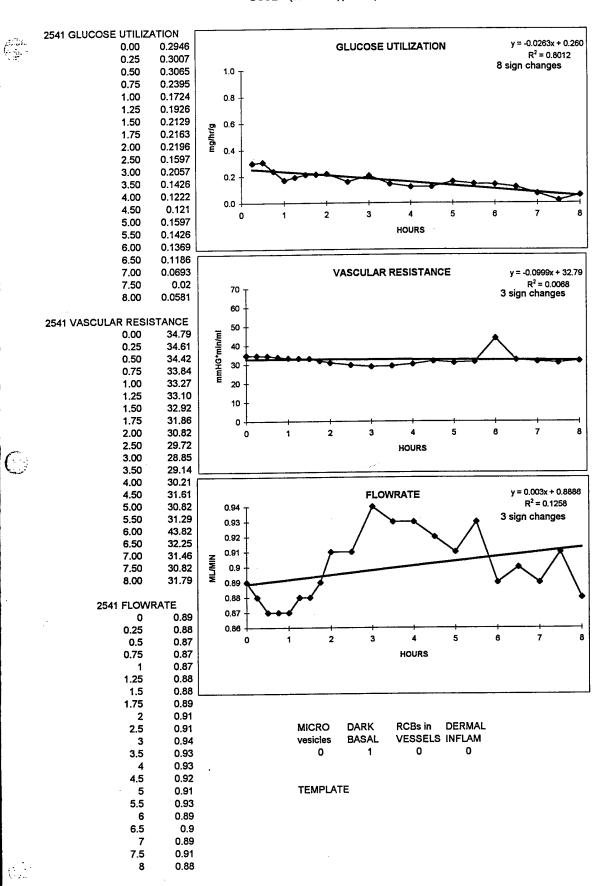
NO HISTOLOGY

NO TEMPLATE

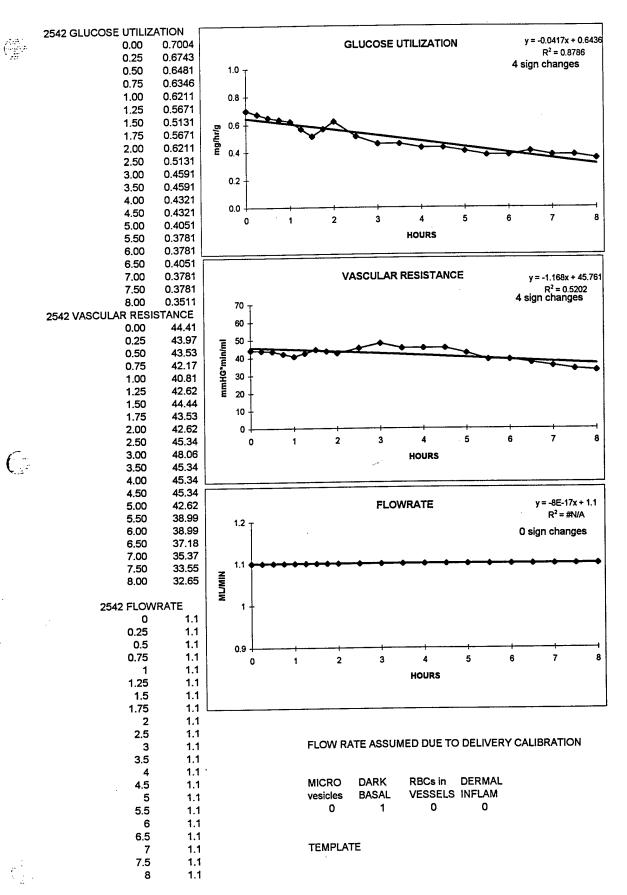
#### 2540PLOT.XLS DOSE = 300 UL ETOH



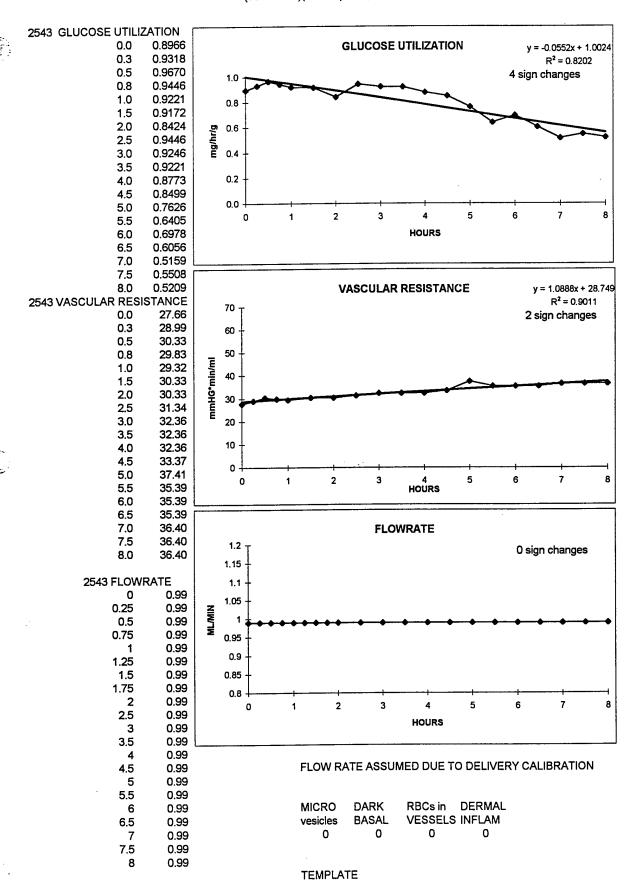
2541PLOT.XLS DOSE = (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH



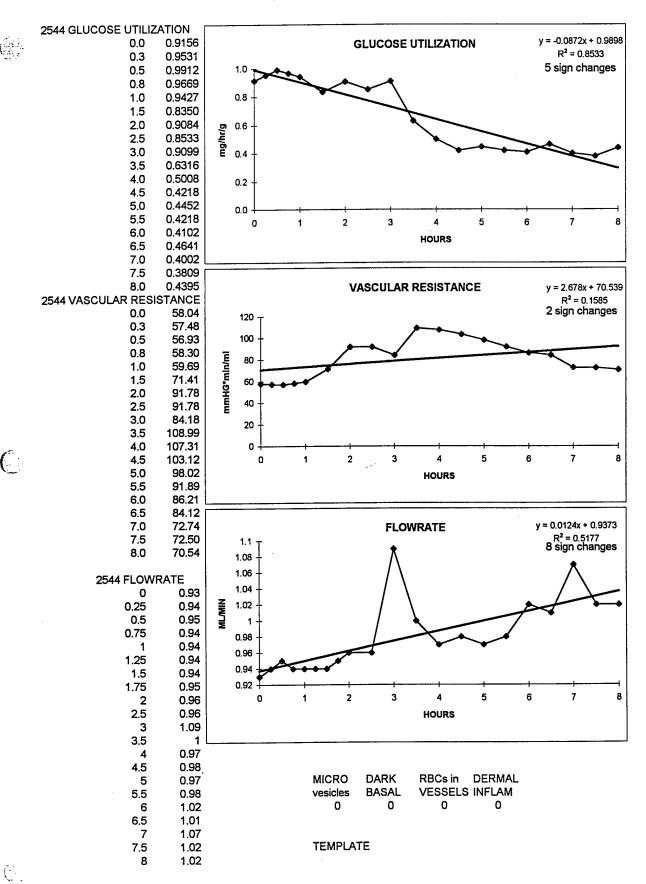
2542PLOT.XLS DOSE = (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH

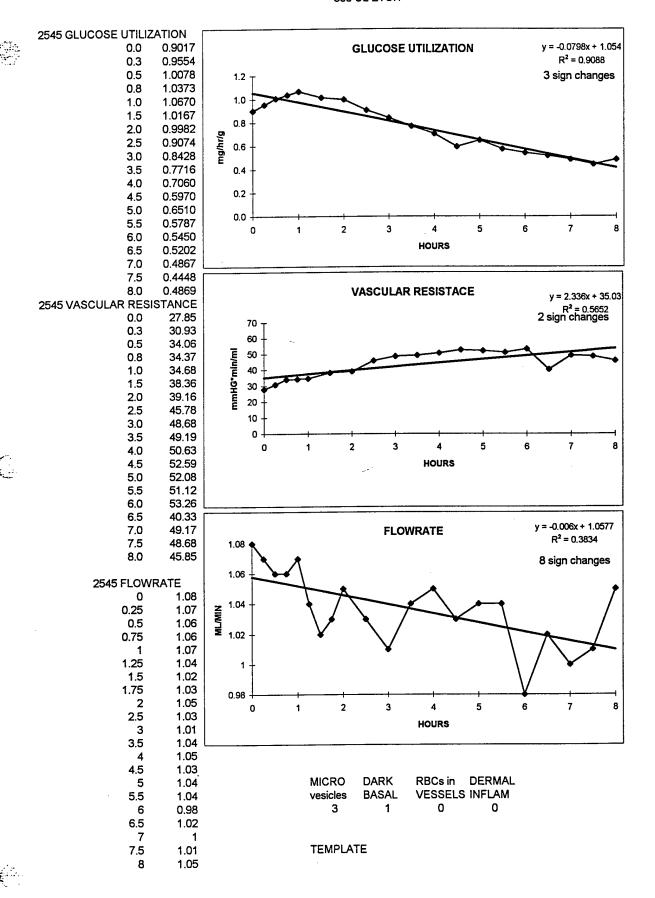


2543PLOT.XLS (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH

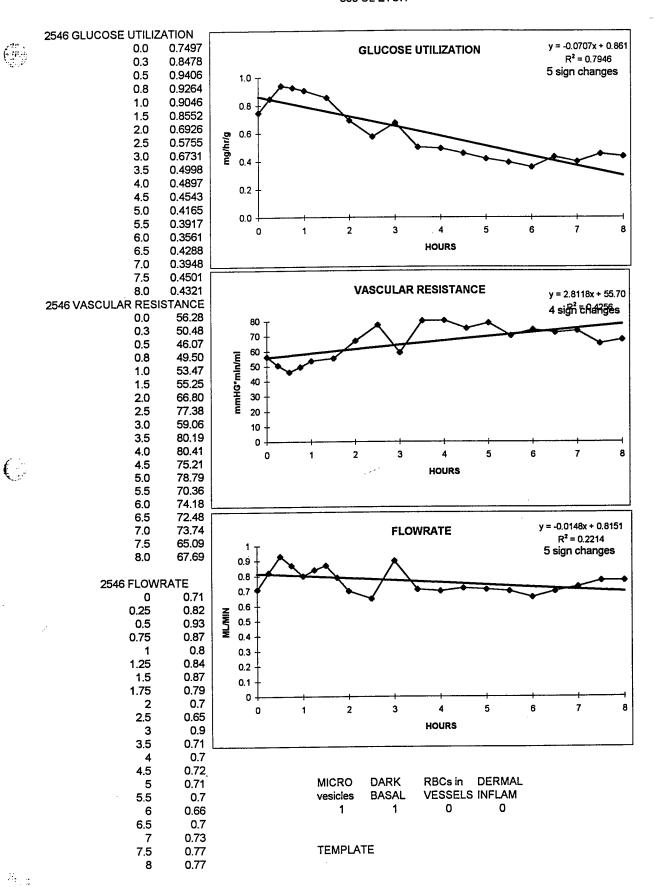


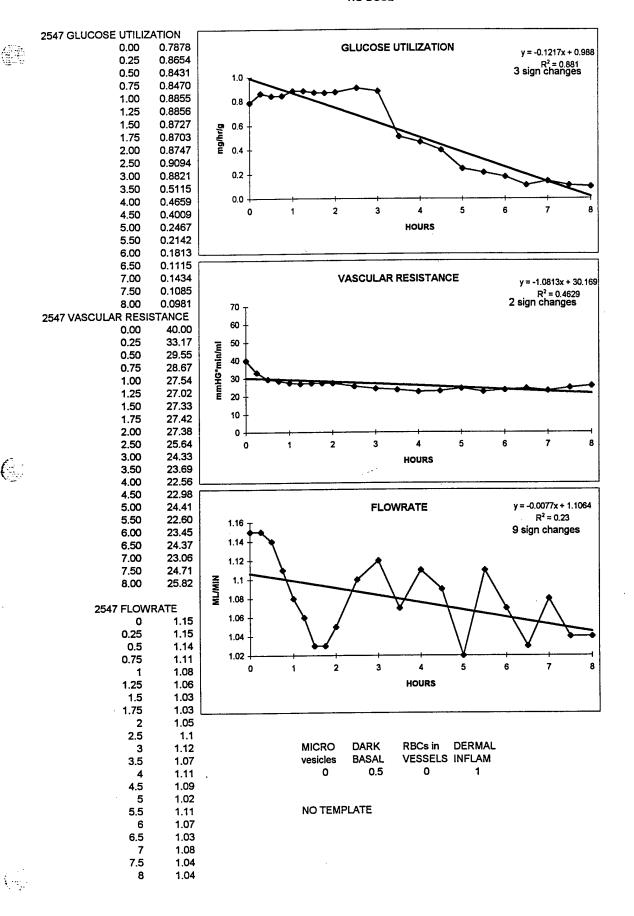
2544PLOT.XLS (50 ug/ml)(300 ul)=15,000 ug HD in ETOH

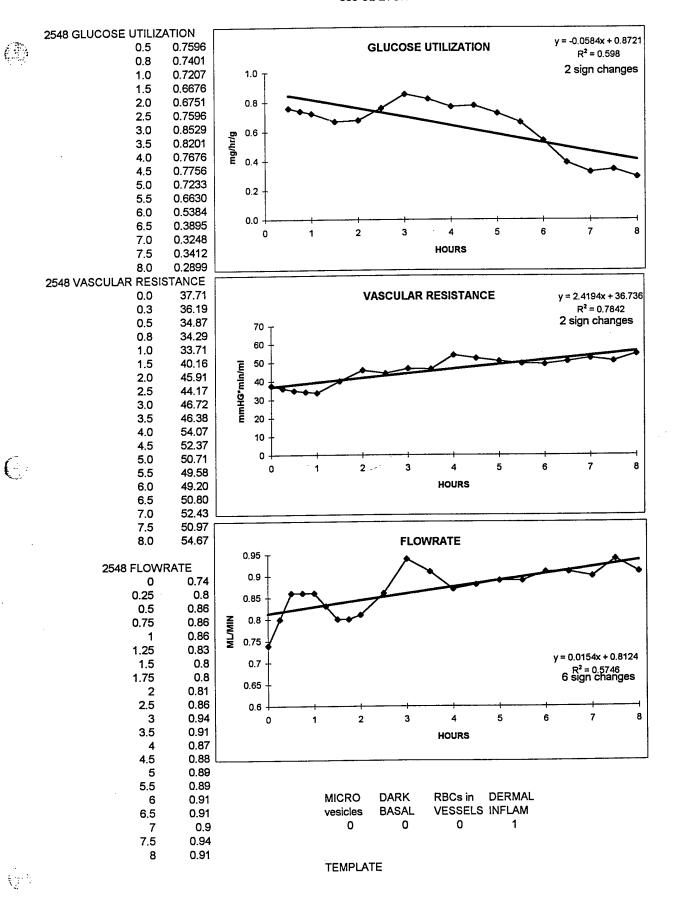


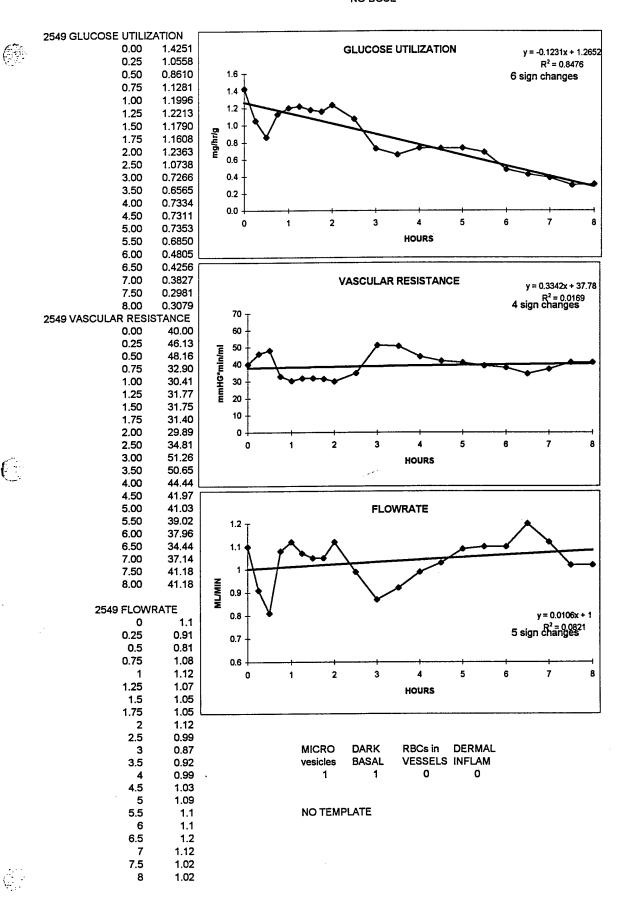


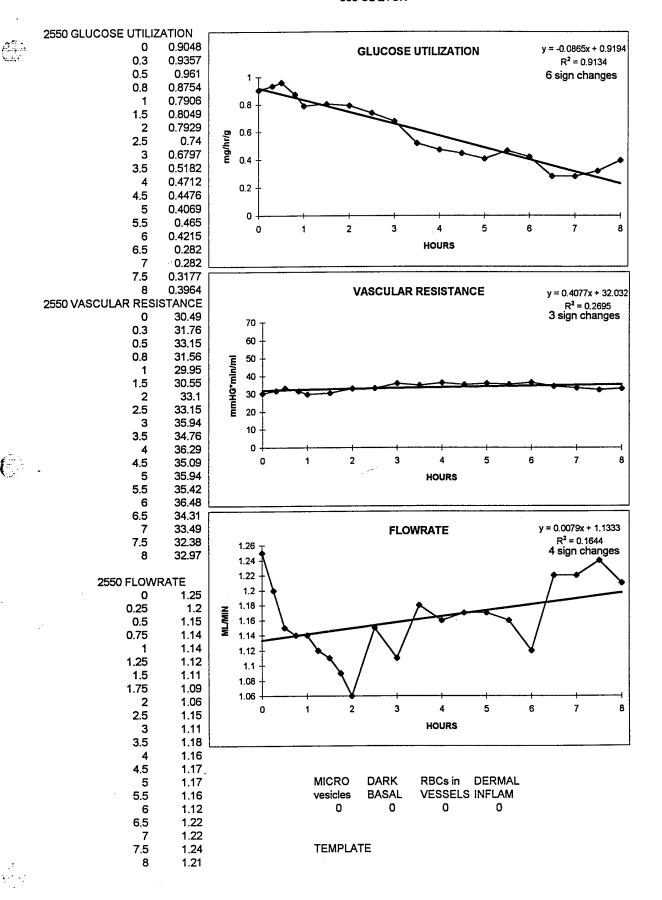
2546PLOT.XLS 300 UL ETOH

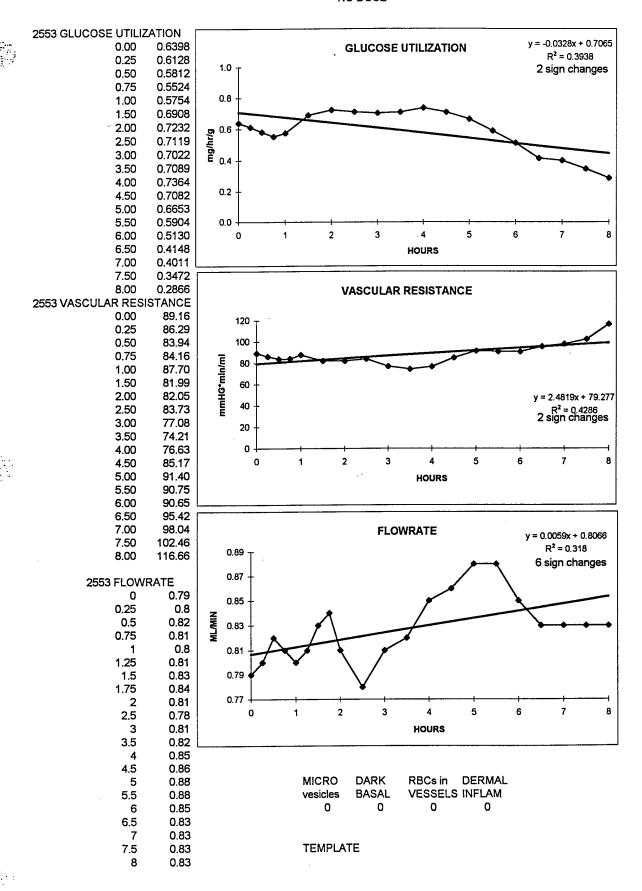


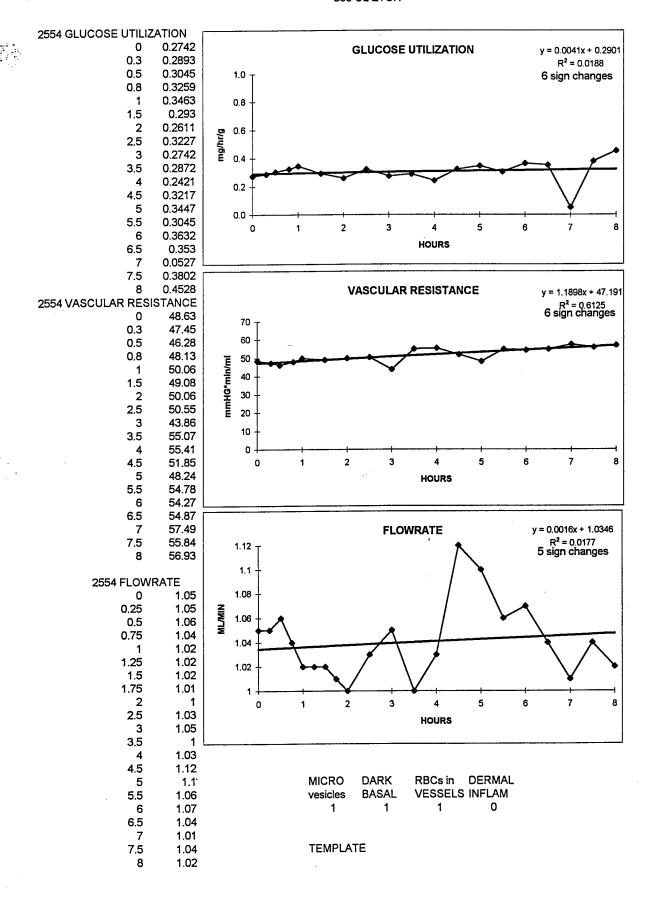












#### APPENDIX E

Listings of Raw Data and Computed Variables

#### Preface to Data Tables: Explanation of Variable Names

In these tables, the listings of raw data and variables computed by SAS are related to variables explained in the text as follows:

Variable in Listings	Definition	Symbol Explained in the Text
FLAPNO	flap number consistent with NCSU-CPTC accounting	
DATE	date of flap harvest and perfusion	
ANIMAL/SIDE	the year, a number assigned to the swine by the supplier, and a letter representing the side of the swine from which the flap was harvested	
PHASE	Phase of the task (1 = technology transfer; 2 = validation)	
FLAPWT	weight (g) of the flap after flushing and before perfusion	$W_{fi}$
DOSETIME	time of dose application	t = 0
GROUP	flap treatment group	
MEDVOL	volume (mL) of media measured in the waste receptacle at the end of the experiment	V <sub>w</sub>
NCSU	an acceptance variable for the flap; "1" denotes acceptance by NCSU-CPTC and "0" denotes non-acceptance	
TARGTIME	the time targeted for taking an observation of physiologic parameters	
ACTLTIME	the actual time an observation of physiologic parameters was taken	
RELTIME	time (hr) after dosing	t
AIRTEMP	perfusion chamber air temperature (C)	
HUMIDITY	perfusion chamber air humidity (relative percent)	
ARTMEDPH	pH of the arterial media	
BPMEAN	mean blood pressure integrated over 2 sec	

### Preface to Data Tables: Explanation of Variable Names (Continued)

Variable in Listings	Definition	Symbol Explained in the Text
MEDTEMP	temperature (C) of the media immediately before entering the flap	
MEANFLOW	average of the lower and upper limits of media flow observed during an observation (mL/min)	
LACTATEA	lactate concentration (g/L) in media sampled from the arterial side	L <sub>a</sub>
DEXTROSA	glucose concentration (g/L) in media sampled from the arterial side	G <sub>a</sub>
LACTATEV	lactate concentration (g/L) in media sampled from the venous, or used, side	L <sub>u</sub>
DEXTROSV	glucose concentration (g/L) in media sampled from the venous, or used, side	G <sub>u</sub>
LACTDEXT	ratio of lactate produce per unit glucose utilized (no units)	M <sub>An</sub>
VRESIST	unadjusted vascular resistance (mmHg•min/mL)	
ADJFLOW	MEANFLOW multiplied by the ratio of the actual to the assumed volumes of media delivered during the experiment (mL/min)	F
ADJRESIS	VRESIST multiplied by the ratio of the actual to the assumed volumes of media delivered during the experiment (mL/min)	VR
GLUCUTIL	glucose utilization (mg glucose/hr/g flap tissue)	GU
CUMGLUC	cumulative glucose utilization (mg glucose/g flap tissue)	CGU

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

									;														
	SUD	0.00	0.0	0.43 0.80 1.07	1.27	2.39	2.98	3.33		OLUG CUM CUM	0.01	0.0	0.56	1.33	2.98	3.88	4.79	4.93	5.03	5.03	5.06	5.16	5.16
NCSU=No	GLUC UTIL			0.84 0.74 0.55	0.39	0.88	0.76	0.68	NCSU=No	GLUC		• 1	1.74	1.58	1.77	1.82	0.53	0.26	0.21	80.0	0.06	0.20	 8.0 8.0
	ADJ RESIS	68.5 136.0 135.3	91.1 84.5	78.0 112.2 142.3	151.3 99.2	130.1	159.4	147.4 153.1		ADJ RESIS		22.1	17.6	11.4	10.6	12.6	44.3	9.95	69.2	81.2	86.7	89.5	95.6 102.4
MEDVOL=525	ADJ FLOW	1.52 0.76 0.77	0.73	1.51 1.58 1.50	1.49	1.52	1.51	1.50	MEDVOL=340	ADJ FLOW		0.50	1.08	0.97	3.5	0.95		1.16	0.91	0.97	6.0	1.01	1.0 7.0 7.0
GROUP=EtOH	VRE- SIST	69.3 137.6 136.8	92.1 85.5	78.9 113.5 143.9	153.1	131.6	141.0	149.2 154.9	GROUP=EtOH	VRE- SIST	•	14.5	1.5	7.5	9.9 9.9	8.3	28.0	30.5	45.3	53.2	56.8	58.6	62.7 67.1
	LACT			0.95 1.01 23	1.52	9.5	1.22	1.26		LACT		•	1.28	1.40	1.51	1.77	2.03 2.03	3.17	2.52	. ,	8.00	2.24	
DOSETIME=11:16	DEXT ROSV			0.915 0.967 0.987	1.030	0.883	0.907	0.933	DOSETIME=10:34	DEXT		•	0.610	0.581	0.539	0.422	0.935	1.000	1.040	1.080	1.080	1.100	1.110
	LACT	0.798	0.915 0.930	0.282 0.256 0.247	0.220	0.325	0.319	0.307		LACT		0.765	0.749	0.832	1.020	1.220	0.385	0.273	0.223	0.70	0.180	0.177	0.166
FLAPWT=29.5	DEXT	0.324	0.278 0.281 0.281	1.190 1.200 1.170	1.160	22.5	1.150	1.160	FLAPWT=32.4	DEXT		0.490	1.180	1.160	1.200	1.100	1.120	1.080	1.120	1.080	1.100	1.170	1.100
PHASE=1 FL	LACT	1.160	1.13	0.022 0.020 0.022	0.022	0.021	0.036	0.022	PHASE=1 FI	LACT		1.160	0.022	0.021	0.020	0.020	0.020	0.019	0.021	0.030	0.020	0.020	0.020
	MEAN	1.50 0.76 0.76	0.76 0.76 0.76	1.50 1.56 1.48	1.50	1.51	1.48	1.48	4-F PH/	MEAN	ı	0.76	1.65	1.48	1.45	1.45		1.77	1.39	67.	1.52	1.54	1.58
SIDE=95-263-4-R	MED TEMP	35.1	35.2 34.4	35.7 35.1 35.6	35.9	35.5	35.2	35.6 35.1	SIDE=95-263-4-L	MED	1.5	36.6	37.6	36.6	36.8	36.8	3, 4, 2, 8, 8, 8,	34.7	35.3	35.7	34.9	33.7	35.1 35.1
	BP MEAN	401 104 104	§25	118 177 213	150	198	525 525	220 230		BP MEAN	36	= ;	<u> </u>	=	<b>^</b> 2	5 ;	<b>ჭ</b>	24	63	2 8	: %	8	98 107
ANIMA	ART MEDPH	4.7.4 7.4 7.4	7.7 7.4 7.4	7.5 7.5 5.7	7.4		4.7 5.5	7.4	ANIMA	ART MEDPH	20.02	7.8	7.6	9.2	. y.	7.4	4.5	7.6	7.0	0.0	7.2	7.9	8.1 7.6
DATE=02/08/95	HUM1 DITY	44.3	43.5 43.5	48.4 44.7 47.0	47.5	42.0	44.7	44.5 46.5	DATE=02/08/95	HUMI	32.8	34.7	27.9	29.9	32.0	31.4	31.8 3.8	33.8	33.6	33.7	34.7	36.5	34.6 35.4
DATE=0	AIR TEMP	37.3 37.3 37.5	37.5 37.5 37.0	37.9 37.4 37.6	38.0	37.9	37.8 37.9	37.9 37.7	DATE=0	AIR TEMP	36.6	37.2	38.6	37.1	37.1	37.3	37.3	37.0	37.5	37.5	37.2	37.2	37.4 36.0
FLAPNO=2505	REL- Time	-1.00 -0.75 -0.50	288	2.50	3.00	.00.7	5.00	5.50	FLAPNO=2506	REL- TIME	-0.85	-0.53	0.00	0.48	1.48	1.98	2.98	3.48	3.98	9 6 4 7	5.48	5.98	6.48
FLAP	ACTL TIME	10:16 10:31 10:46	11:16	12:16 12:46 13:16	13:46	15:16	15:46 16:16	16:46 17:16	FLAP	ACTL TIME	9:43	10:02	10:34	11:03	12:03	12:33	15:10	14:03	14:33	5.33	16:03	16:33	17:03 17:33
1	TARG	10:16 10:31 10:46	11:31 12:01	12:31 13:01 13:31	14:01	15:31	16:01 16:31	17:01 17:31		TARG TIME	6:43	9:58	10:13	10:58	11:58	12:28	12:58	13:58	14:28	15.28	15:58	16:28	16:58 17:28

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	OU10	0.01	0.18 0.35 0.51 0.51	0.51 0.95 0.95 0.95 0.95 1.04	ON TO WITO	0.01 0.06 0.34 0.85 0.85 1.16	1.80 2.15 2.45 3.42 3.42 4.11 4.45
NCSU=No	GLUC UTIL	0.30 0.00 0.00 0.34	0.00 0.33 0.00 0.00	0.0000000000000000000000000000000000000	NCSU=No GLUC UTIL	0.67 0.18 0.50 0.63 0.66 0.40 0.62	0.60 0.63 0.63 0.70 0.57 0.69 0.69
MEDVOL=335	ADJ RESIS	59.9 52.1 54.6 54.9 55.2	51.6 55.0 66.8 76.7 80.3	139.0 157.6 161.8 157.5 150.5	MEDVOL=265 J ADJ M RESIS	137.2 123.9 167.0 179.8 183.7 184.8 159.5	219.1 208.4 195.8 218.1 223.0 237.5 188.7 238.9
	ADJ FLOW	0.67 0.62 0.62 0.62	0.63 0.63 0.63 0.63	0.60 0.57 0.58 0.58 0.68	8 2	0.50 0.49 0.47 0.50 0.50 0.50	0.48 0.48 0.47 0.50 0.48 0.48
GROUP=No Topical	VRE- SIST			89.7 101.7 104.4 104.4 101.7 99.0	GROUP=No Topical LACT VRE-		111.9 106.4 100.0 111.4 113.8 121.3 96.4 77.8
GROUP=N	LACT	1.25	1.56	0.25 	GROUP=  LACT DEXT	0.29 1.20 1.26 1.36 1.36	1.23 1.28 1.21 1.21 1.24 1.25 1.36
=10:50	DEXT	1.080 1.090 1.110 1.140	1.120 1.130 1.130 1.170	1.180 1.180 1.180 1.180 1.140	DOSETIME=10:32 LACT DEXT ATEV ROSV	1.020 1.040 0.998 1.010 1.030	1.040 1.020 1.020 1.050 1.050 1.040 1.040
DOSETIME=10:50	LACT	0.123 0.145 0.163 0.163 0.154	0.159 0.156 0.155 0.163 0.132	0.120 0.090 0.146 0.155 0.168 0.178	DOSETIM LACT ATEV	0.076 0.118 0.192 0.252 0.259 0.257	0.244 0.257 0.257 0.255 0.254 0.255 0.268 0.267
FLAPWT=16.7	DEXT	1.160 1.020 1.050 1.110	1.070 1.070 1.220 1.220 0.991	1.180 1.180 1.190 1.190	FLAPWT=15.9 CT DEXT EA ROSA	1.200 1.130 1.180 1.180 1.190 1.200	1.220 1.210 1.220 1.240 1.240 1.240 1.250
	LACT	0.023 0.019 0.020 0.021 0.023	0.020 0.021 0.024 0.023 0.020	0.022 0.022 0.019 0.019 0.022 0.020	_ 4F	0.023 0.024 0.024 0.023 0.023 0.023	0.024 0.023 0.023 0.024 0.024 0.023 0.023
R PHASE=1	MEAN	1.04 1.07 0.97 0.98	1.08 1.08 1.08	0.93 0.89 0.90 1.06 1.06	L PHASE=1 MEAN FLOW	0.98 0.98 0.95 0.97 0.97	0.89 0.94 0.93 0.98 0.98 0.94 0.97
DE=95-258-1-R	MED	36.1 36.3 36.1 36.2	36.1 36.1 36.2 36.2	36.2 36.2 36.2 36.7 36.7 36.7	.DE=95-258-1- BP MED IEAN TEMP	35.8 37.7 36.6 37.7 37.7 37.7	37.6 37.7 37.7 37.6 37.6 38.0 38.0 38.0
-	BP MEAN	3777	28 4 4 3 3 4 4 8 8 3 3	28 88 83 84 85 85 85 85 85 85 85 85 85 85 85 85 85		62 22 24 24 25 26 26 26 26 26 26 26 26 26 26 26 26 26	98 113 113 113 113 113 113 113 113 113 11
ANIMAL/S	ART MEDPH	7.9 6.4 7.3 7.5	0.25.24.6	8.0 7.7 7.9 7.9 7.2 7.2 7.2	ANIMAL/S ART MEDPH	6.4.7.7.7.7.7.5.5.7.7.5.5.7.7.5.5.7.7.5.5.7.7.5.5.7.7.5.5.7.7.5.5.7.7.5.5.7.7.7.5.7.7.5.7.7.7.5.7.7.5.7.7.5.7.7.7.5.7.7.7.5.7.7.7.7.5.7.7.7.7.7.5.7	6.7.7.7.7.7.7.7.6.6.7.7.7.7.7.7.7.7.7.7
	HUMI DITY	35.0 32.2 34.3 34.6 34.1	34.7 34.6 33.6 33.6 33.6	33.7 33.7 33.7 33.7 36.9	<b>⊢</b> ≻	43.1 44.8 44.9 46.1 44.9	45.7 45.7 45.0 46.2 46.5
DATE=02/09/95	A1R TEMP	36.8 36.7 36.8 36.7 36.8	36.8 36.8 36.4 36.7	38888888888888888888888888888888888888	DATE=02/09/95 AIR HUM TEMP DIT	38.3 38.4 38.1 38.1 38.7 38.1	38.1 38.1 38.1 38.1 38.2 38.2 38.2
	REL- TIME	-0.75 -0.50 -0.25 0.00 0.50	1.50 2.52 3.52 3.52	6.05 7.00 7.50 7.50 7.50 8.00	늘	-0.78 -0.50 -0.23 0.00 0.47 1.47	2.27 3.29 4.47 5.97 6.97 6.97
FLAPNO=2507	ACTL TIME	10:05 10:20 10:35 10:50	11:50 12:20 13:21 13:50 14:21	14:51 15:20 16:20 16:53 17:20 18:20 18:50	FLAPNO=2508 ACTL REI TIME TII	9:45 10:02 10:18 10:32 11:00 11:30 12:30	13:00 14:00 14:30 14:30 15:00 15:30 16:30
	TARG	10:20 10:35 10:50 11:20	11:50 12:20 13:20 13:50 14:50	74:50 15:20 15:20 16:50 17:20 17:50 18:20 18:50	TARG	9:45 10:00 10:15 10:30 11:30 12:00	13:00 14:30 14:30 15:00 15:30 16:30 17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS
USING SHADY SIDE PIGS AND SIGMA BSA

1 1 1 1 1 2 3	OLUC CUM	4.72 4.96 5.17	1	OLUC CUM CUM	0.01	0.82	1.38	1.79	2.20 2.20	2.40	2.98	3.33 4.33	3.86	4.09		CUM	0.01 0.24 0.48 0.64 1.18 1.59 1.98
NCSU=No	GLUC	0.53 0.48 0.43	NCSU=No	GLUC	0.35	8 9 5	0.28	0.45	0.32	0.50	0.53	0.71	0.46	0.46	NCSU=No	GLUC	0.91 0.87 0.80 0.96 1.07 0.82 0.78
MEDVOL=265	ADJ RESIS	161.3 131.2 158.3	MEDVOL=360	ADJ RESIS	222.5 325.1	240.8 201.1	197.3	260.1	251.9 228.7	241.9	299.3	263.5	290.0	277.1 280.1	MEDVOL=304	ADJ RESIS	118.4 113.8 108.9 96.4 83.1 96.5 101.3
	ADJ FLOW	0.48 0.50 0.48		ADJ FLOW	0.68	0.67	0.66	2.6	0.66	0.3	0.55	0.65	9.6	0.62 0.61		ADJ FLOW	0.58 0.58 0.54 0.63 0.65 0.56
GROUP=No Topical	VRE- SIST	82.4 67.0 80.9	GROUP=No Topical	VRE- SIST	154.3	139.5	136.8	180.4	174.7	167.8	207.6	182.8	201.2	192.2 194.3	GROUP=No Topical	VRE- SIST	69.3 66.7 63.8 56.5 59.3 68.5
GROUP=	LACT	1.36 1.42 1.54	GROUP=	LACT	0.46	0.63	1.83	1.35	2.11 1.54	1.24	1.13	1.15 5.5	1.13	1.05	GROUP	LACT	0.65 0.79 0.98 0.90 1.03 1.00
DOSETIME=10:32	DEXT	1.090	DOSETIME=11:30	DEXT ROSV	1.060	1.050	 86:	1.130	1.080	1.120	1.050	1.010	1.19	1.140	DOSETIME=10:50	DEXT	0.829 0.852 0.852 0.848 0.904 0.925 0.974
DOSETIM	LACT	0.227 0.207 0.208	DOSETIM	LACT	0.095	0.256	0.259	0.242	0.339	0.285	0.362	0.415	0.296	0.264	DOSETI	LACT	0.297 0.344 0.403 0.427 0.417 0.427 0.427
FLAPWT=15.9 ontinued)	DEXT	1.240 1.240 1.230	FLAPWT=26.8	DEXT	1.220	1.320	1.230	1.300	1.230	1.330	1.350	1.350	1.350	1.370	FLAPWT=27.7	DEXT	1.250 1.250 1.250 1.330 1.370 1.320
ŭ	LACT	0.023 0.023 0.023		LACT	0.021	0.023	0.024	0.025	0.023	0.024	0.024	0.024	0.024	0.023		LACT	0.024 0.023 0.023 0.023 0.023 0.023 0.022
PHASE=1	MEAN	0.94	PHASE=1	MEAN	0.99	0.97	0.95	0.92	1.04	1.06	. 6	0.93	0.87	0.90	PHASE=1	MEAN	1.00 0.99 0.93 1.08 1.13 0.96 1.05
L/SIDE=95-258-1-L	MED	37.9 38.0 37.8	/SIDE=95-21-2-R	MED TEMP	36.8 36.2	35.6	34.5 5.4.5	36.0 36.4	36.2 36.1	36.1	36.6 36.6	36.5 74.5	36.5	36.4 36.9	AL/SIDE=95-21-2-L	MED	37.2 37.2 37.3 37.3 37.2 37.3 37.3
SIDE=9	BP MEAN	283	/SIDE=	BP MEAN	152 168	129	130	151	<del>3</del> 5	12	<u> </u>	170	14.5	17 17 17	/SIDE=	BP MEAN	55 55 55 55 55 56 57
ANIMAL/	ART MEDPH	7.5	ANIMAL	ART Medph	7.4	7.5	۲.۲ د کار	7.5	7.4	7.4	7.4	7.6	2.0.	7.3	ANIMAL	ART Medph	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
	HUMI DITY	44.5 46.0 45.0	15/95	HUMI DITY	35.3 35.0	41.2 38.4	36.7	35.5	42.0 33.7	33.5	33.3	34.3	32.8	33.4 34.0	15/95	HUMI	37.1 35.5 35.7 35.7 35.7 35.2 35.5
DATE=02/09/95	AIR	38.4 38.2 38.2	DATE=02/15/95	AIR TEMP	36.0 36.1	35.8	35.2	35.9	36.3 36.3	36.2	36.8 36.8	36.5	36.4	36.4 36.4	DATE=02/15/95	AIR TEMP	37.7 37.8 37.9 37.9 37.9 38.0 38.0
	REL- TIME	6.98 7.47 7.97	FLAPN0=2509 I	REL- TIME	-1.50	0.05	.00	2.00	3.50 3.08	3.50	4.50	5.00	9.9	6.50 7.00	FLAPNO=2510	REL- TIME	-0.73 -0.47 -0.17 0.00 0.50 1.00 1.50
FLAPNO=2508	ACTL TIME	17:31 18:00 18:30	. FLAPNO	ACTL TIME	10:00	11:15	12:30	13:00	14:00	15:00	16:00 16:00	16:30	17:30	18:00 18:30	- FLAPN	ACTL TIME	10:06 10:22 10:40 10:50 11:20 11:50 12:50
	TARG	17:30 18:00 18:30	1 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	TARG	10:45	11:15 11:30	12:30	13:00 13:30	14:00	15:00	15:50 16:00	16:30	17:30	18:00 18:30	1	TARG	10:05 10:35 10:35 10:50 11:20 12:20 12:50

# TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

						•				
	OLUC	2.63 2.76 2.02 3.02 3.14 3.14 3.33 3.33		CUM	0.01 0.12 0.26 0.47 0.79	2.50 2.82 2.82 2.82	3.24 3.24 3.32 4.15 4.41		OLUC	0.01
NCSU=No	GLUC	0.51 0.26 0.24 0.11 0.13 0.17 0.00	NCSU=No	GLUC UTIL	0.69 0.46 0.55 0.76 0.68	0.62 0.73 0.65 0.63	0.45 0.48 0.44 0.45 0.52	NCSU=No	GLUC UTIL	0.61
MEDVOL=304	ADJ RESIS	139.6 155.7 160.4 160.6 163.3 151.2 153.9 164.3 179.8	MEDVOL=334	ADJ RESIS	91.3 74.9 74.9 80.1 70.1	85.3 85.1 95.0	%5.5 99.4 99.4 96.3 95.9	MEDVOL=260	ADJ RESIS	7.07
	ADJ FLOW	0.59 0.58 0.58 0.59 0.59 0.55 0.55		ADJ FLOW	0.57 0.61 0.63 0.69 0.69	0.55 0.62 0.61 0.58	0.56 0.56 0.56 0.56 0.56		ADJ FLOW	0.52
GROUP=No Topical	VRE- SIST	81.8 91.2 93.9 95.7 95.7 90.2 96.3 96.3	GROUP=No Topical	VRE- SIST	58.8 50.8 51.6 44.9	51.5 48.5 61.1 61.1	62.1 64.0 62.0 65.9 61.7	GROUP=No Topical	VRE- SIST	35.4
GROUP=	LACT	1.24 1.52 1.34 1.28 2.70 2.05 1.57 1.25		LACT	0.54 0.93 0.77 1.01	1.06	1.10 1.16 1.18 1.17 0.96		LACT	1.16
DOSETIME=10:50	DEXT ROSV	1.060 1.140 1.200 1.200 1.220 1.230 1.230 1.230 1.240	DOSETIME=11:02	DEXT	0.702 0.723 0.737 0.721 0.729	0.663 0.700 0.694 0.734	0.826 0.826 0.841 0.918 0.928 0.938	DOSETIME=10:25	DEXT	0.535
DOSETIM	LACT ATEV	0.307 0.220 0.165 0.165 0.178 0.145 0.149 0.145	DOSETIM	LACT	0.200 0.238 0.247 0.288 0.280	0.377 0.358 0.371 0.356 0.336	0.282 0.282 0.279 0.265 0.280 0.280	DOSETIA	LACT ATEV	0.289
FLAPWT=27.7 ontinued)	DEXT	1.290 1.270 1.310 1.270 1.290 1.330 1.290	FLAPWT=26.1	DEXT	1.040 0.937 0.982 1.070 1.040	0.977 1.020 1.030 1.020	1.080 1.080 1.100 1.130 1.180	FLAPWT=24.2	DEXT ROSA	0.772
()	LACT	0.022 0.022 0.023 0.023 0.023 0.023 0.022 0.022		LACT	0.018 0.018 0.018 0.018	0.018 0.019 0.018 0.027	0.020 0.017 0.022 0.020 0.020		LACT	0.015
PHASE=1	MEAN	1.02 0.97 0.99 1.01 1.04 1.01 0.97 0.94	PHASE=1	MEAN	0.89 0.98 0.95 1.07	0.86 0.97 0.99 0.97	0.89 0.88 0.92 0.92	L PHASE=1	MEAN	1.05
DE=95-21-2-L	MED	37.3 37.3 37.3 37.3 37.4 36.7 36.2	IDE=95-22-1-R	MED	33.7 35.8 35.7 35.8 36.6	37.2 36.8 36.8 37.2	36.9 36.8 37.0 36.8 36.9	ANIMAL/SIDE=95-22-1-L	MED	34.9
	BP MEAN	83 93 83 84 96 96 97	/S1DE=9	BP MEAN	75 74 74 74 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75	22224	25 27 28 27 28 27 28	./SIDE=	BP	37
ANIMAL/SI	ART Medph	7.55	ANIMAL/S	ART MEDPH				ANIMAL	ART MEDPH	7.7
15/95	HUMI	36.1 35.5 35.0 36.5 37.3 37.3 38.0 37.4 36.4	/16/95	HUMI DITY	24.5 31.0 36.4 37.3 40.1	40.8 27.2 30.7 36.0 36.1	36.93 36.93 36.93 36.93 36.93	/16/95	HUMI	43.5
DATE=02/15/95	AIR TEMP	38.0 38.0 38.0 38.0 38.0 38.0 37.9 37.9	DATE=02/16/95	AIR	36.4 36.3 36.3 37.2 36.3	36.55 36.55 36.56 36.56	36.8 36.7 36.6 37.3 37.3	DATE=02/16/95	AIR	35.0
FLAPNO=2510	REL.	2.50 3.50 3.50 4.50 5.50 7.50 7.50	FLAPN0=2511	REL- TIME	-0.77 -0.53 -0.28 0.00 0.47	1.47 2.47 2.97 3.47	5.97 4.47 4.97 5.97 5.97 6.97	FLAPNO=2512	REL- TIME	-0.75
- FLAPNC	ACTL TIME	13:20 14:20 14:52 15:20 15:52 16:20 16:50 17:50	- FLAPNO	ACTL TIME	10:16 10:30 10:45 11:02 11:30	12:30 13:00 14:00 14:30	15:00 16:30 16:30 17:00 18:00	- FLAPN	ACTL TIME	9:40
	TARG TIME	13:20 14:50 14:50 15:20 15:50 16:50 17:20	1	TARG	10:15 10:30 10:45 11:30 12:00	12:30 13:00 14:00 14:30	15:00 15:30 16:30 17:30 17:30 17:30		TARG	05:6

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	OU O	0.15 0.37 0.53 0.96 1.43 1.98 2.43 2.92 3.38 4.69 5.14 5.79 6.27 6.64	CUM GLUC 0.01 0.05 0.15 0.28 0.38 0.56 0.66 0.77 1.01 1.09 1.123
NCSU=No -	GLUC	0.57 0.75 0.81 0.99 1.11 0.93 0.84 0.81 1.00 0.87 1.22 1.04 0.72 0.72	6LUC UTIL 0.00 0.12 0.23 0.23 0.18 0.19 0.18 0.18 0.17 0.17
MEDVOL=260	ADJ RESIS	7 71.8 66.5 65.6 66.5 7 65.0 6 55.7 7 64.0 7 73.7 7 73.7 7 73.7 7 73.7 7 73.7 9 70.6 9 70.9 9 90.8 9 108.0 7 114.1 9 120.8	ADJ 139.2 164.2 164.2 168.4 153.7 168.7 168.7 168.7 168.7 168.7 168.7 168.7 168.7 168.7 107.4 107.4 107.4 107.4 107.4
	ADJ FLOW	4 N 4 N N N A 4 4 4 4 4 4 4 4 4 4 4 4 4	ADJ FLOM 0.67 0.68 0.68 0.68 0.67 0.67 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65
GROUP=No Topical	VRE- SIST	1.25 36.0 0. 1.07 37.0 0. 1.21 32.9 0. 1.02 30.6 0. 0.98 27.9 0. 0.95 33.3 0. 1.02 32.1 0. 0.94 36.9 0. 1.02 45.4 0. 0.97 35.5 0. 0.97 35.5 0. 0.97 35.5 0. 0.97 35.5 0. 0.98 60.5 0. 0.98 60.5 0.	VRE- SIST 97.9 115.5 118.6 118.6 118.6 118.6 118.6 118.6 118.6 118.6 105.4 101.6 89.4 84.9 77.7 77.7 77.7 77.7 67.8 66.3
GROUP=	LACT		LACT DEXT 0.91 0.91 0.91 1.04 0.91 1.13 1.10 1.24 1.25 1.26 1.26 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20
DOSETIME=10:25	DEXT ROSV	0.318 0.505 0.344 0.466 0.356 0.462 0.376 0.438 0.392 0.410 0.407 0.410 0.440 0.412 0.433 0.432 0.434 0.432 0.436 0.432 0.436 0.633 0.436 0.633 0.350 0.616 0.319 0.681 0.311 0.741	DEXT ROSV 1.300 1.150 1.170 1.170 1.190 1.190 1.200 1.200 1.200 1.220 1.250
DOSETIM	LACT	0.318 0.344 0.356 0.376 0.407 0.448 0.448 0.448 0.436 0.436 0.436 0.319 0.319 0.319	LACT ATEV 0.036 0.094 0.137 0.167 0.168 0.169 0.169 0.169 0.169 0.169 0.169 0.169
WT=24.2 ued)	DEXT	14 0.749 114 0.767 114 0.782 115 0.737 114 0.813 115 0.839 113 0.831 113 0.837 113 0.855 113 0.931 117 1.120 118 1.050 113 1.050	DEXT ROSA 1.060 1.270 1.310 1.320 1.330 1.330 1.330 1.340 1.340 1.340
PHASE=1 FLAPWT=24.2 (continued)	LACT		LACT ATEA 0.022 0.023 0.023 0.020 0.019 0.017 0.017 0.004 0.004 0.004
	MEAN	0.95 0.95 0.95 1.10 1.10 0.84 0.84 0.84 0.79 0.99 0.99 0.99 0.99 0.99	MEAN FLOW 0.95 0.97 1.01 0.99 0.92 0.90 0.90 0.90 0.90
ANIMAL/SIDE=95-22-1-L	MED	34 35.8 35 36.2 35 36.2 33 36.5 31 36.4 30 36.6 31 36.6 31 36.6 31 36.6 44 36.6 44 36.6 53 36.6 54 36.6 55 36.6 57 36.6	MED 34.4 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1
./SIDE=9	BP MEAN		MEAN 93 93 112 1112 1115 1105 1105 1005 98 93 93 95 65 65 65 65 65 65 65 65 65 65 65 65 65
ANIMAI	ART Medph	7.3 7.4 7.1 7.3 7.4 7.5 7.5 7.6 7.6 7.6	MEDPH 7.7.4 4.7.7 7.4.4 7.7.4
716/95	HUMI DITY	38.9 37.7 36.3 36.3 36.1 36.0 36.0 35.9 35.9 35.9 35.9 35.9 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0	HUMI DITY 21.7 19.0 42.2 43.1 27.2 37.4 38.3 38.3 38.3 38.3 38.3 38.3 38.3 38
DATE=02/16/95	AIR	35.5 38.9 35.9 37.7 35.9 36.3 36.0 36.1 36.1 35.9 36.2 35.8 36.2 35.2 36.2 35.2	AIR TEAP 36.2 38.2 38.2 38.3 38.3 38.3 38.3 38.3 38.3 38.5 3
FLAPN0=2512	REL- TIME	9.55 -0.50 9.57 -0.22 9.57 0.53 1.25 1.00 1.55 1.50 2.25 2.00 2.25 2.00 2.25 2.00 2.25 2.00 2.25 4.00 4.25 4.00 4.25 4.00 4.25 6.00 6.25 6.00 6.25 6.00	11 ME - 0 - 73 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -
- FLAPN(	ACTL TIME	9:55 10:12 10:25 10:57 11:25 11:25 12:25 13:25 14:25 14:25 14:54 15:25 16:25 16:25 17:25	ACTL 10:18 10:33 10:48 11:32 11:32 11:32 12:30 13:00 13:31 14:30 15:00 15:30 16:00 16:30 17:30
	TARG	9:50 10:01 10:05 11:05 11:05 12:05 12:05 13:05 13:05 14:05 15:05 16:05 1	TARG 10:15 10:15 10:30 11:30 11:30 12:30 12:30 12:30 12:30 12:30 12:30 15:30 16:30 17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SUN GLUC	0.01	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.0	0.07		S 5	100	0.01	0.49	0.72	1.00		2.10	2.83	3.21	3.59	5.97	4.69	5.04	5.36	6.07
NCSU=No	GLUC	0.00	9.03	800	888	.0	0.0	9.0	0.0	8 8	.08	NCSU=No	GLUC	9	3.40 1.02	0.92	0.92	0.92	0.74	0.71	2 2	0.80	0.77	7.7	0.72	0.70	9.6	0.64
MEDVOL=418	ADJ RESIS	66.7 73.5 72.0	64.2	57.2	54.5	61.1	63.6	62.7	67.2	(3.6 7.5	58.7	MEDVOL=386	ADJ	RE313	86.7 65.8	64.1	62.4	58.5 5.5	58.3	54.7	71.5 7.4	50.2	45.5	4.0,	47.1	49.1	20.8	47.8
	ADJ FLOW	0.81	0.79	0.82	22.6	.36	0.82	88.8	0.83	9.0	0.82		AbJ		0.69	0.72	0.72		22.0	9.66	2 %	0.78	0.77	2.5	2.0	0.73	0. 1.2	0.7 2
GROUP=No Topical	VRE- SIST	53.7 59.2 58.0	58.2	46.1	43.9	44.4 46.5	51.2	50.5	54.1	59.5 2.5	47.3	GROUP=No Topical	VRE-	1010	64.5 49.0	47.7	46.4	45.5	43.4	40.7	2 6 2 6 2 7 2 8	37.3	33.8	5, 5, 6, 7, 7, 7,	35.0	36.5	37.8	36.5
GROUP=	LACT		1.30	6.							•	GROUP=N	LACT	-	0.08	0.84	0.95	 	1.24	1.21	1.28	1.16	1.17		. 1.	1.13	1.15	1.06
DOSET IME=10:15	DEXT	1.280 1.290 1.300	1.320	1.310	1.320	1.320	1.330	1.360	1.330	1.340	1.340	E=11:03	DEXT	ACOA ACOA	0.583	0.827	0.847	0.849	0.875	0.878	0.899	0.883	0.893	0.876	0.882	0.896	0.905	0.935
DOSETIN	LACT	0.031 0.320 0.034	0.035	0.043	0.036	0.029	0.027	0.021	0.020	0.020	0.015	DOSETIME=11:03	LACT	N E	0.211	0.393	0.439	0.465	0.469	0.467	0.455	0.429	0.420	0.425	0.411	0.387	0.372	0.328
FLAPWT=20.2	DEXT	1.270 1.290 1.300	1.330	1.270	1.320	1.280	1.310	1.330	1.330	1.340	1.340	FLAPWT=28	DEXT	¥60¥	2.290	1.270	1.290	1.270	1.240	1.250	1.240	1.240	1.240	1.250	1.220	1.230	1.220	1.240
_	LACT	0.020	0.021	0.018	0.017	0.017	0.014	0.010	0.008	200.0	0.006		LACT	<b>X</b>	0.066	0.020	0.019	0.020	0.018	0.018	0.01	0.014	0.013	20.0	0.0	0.010	0.009	0.006
L PHASE=1	MEAN	1.01	1.03	1.03	0.87	0.9	1.02	.6	7.04	0.95	1.02	-R PHASE=1	MEAN		0.93	0.97	0.97	1.02	0.95	0.89	1.98	1.05	1.04	9.0	1.00	0.99	0.98	0.9
'SIDE=95-21-3-1	MED	36.8 35.4 35.5	35.7	36.2	36.2	36.5	36.1	35.9	35.9	36.1	36.1	NIMAL/SIDE=95-22-2-R	MED	E U	36.3 36.1	36.3	36.3	36.3	36.2	36.4	2.05 2.05 2.05	36.2	35.7	26.7	36.6	36.6	36.6	36.7
/SIDE=	BP MEAN	58 58 58	53	44	38 5	<del>,</del> 4	22	2 12	26	56 75	8	NL/SIDE	8	E	09	46	45	77	- 7	8 8	5 6 5	36	32	ς ξ	3 2	38	37	36
ANIMAL	ART MEDPH	7.4 7.4 7.5	7.5			c. 7.	7.4	7.7	7.4	7.4	7.7	ANIM	ART	707	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.7	7.4	7.4	4.7.
22/95	HUMI DITY	34.0 27.4 30.0	32.0 32.8	36.5	36.7	36.0	38.0	36.2	36.0	36.1	33.8	2/23/95	HUMI		39.7	39.0	37.6	37.4	36.0	36.4	37.0	37.2	40.0	59.8 25.2	37.2	38.1	37.1	36.9
DATE=02/22/95	AIR	32.4 35.6 35.7	35.6	35.8	35.0	35.4	35.8	35.8	35.8	35.6	35.6	DATE=02/23/95	AIR	Ē	36.4													
	REL- TIME	-0.75 -0.50 -0.25	0.00	1.53	2.52	3.50	6.4	2.6	5.50	6.00	7.02	FLAPN0=2515	REL-		-1.05	-0.55	-0.30	0.00	0.95	1.47	- 25 26 26 26	2.95	3.45	3.97	4.45	5.45	5.93	6.95
- FLAPNO=2514	ACTL TIME	9:30 9:45 10:00	10:15	11:47	12:46	13:15	14:15	15:15	15:45	16:15	17:16	FLAP	ACTL	E -	10:00	10:30	10:45	11:03	12:00	12:31	13:00	14:00	14:30	15:01	16:00	16:30	16:59	17:51 18:00
	TARG	9:30 9:45 10:00	10:15	11:45	12:45	13:45	14:15	15:15	15:45	16:15	17:15		TARG	Ē	10:00	10:30	10:45	11:15	12:15	12:45	13:15	14:15	14:45	15:15	16:15	16:45	17:15	17:45 18:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	OLUC CUM	0.01	0.36	0.88	1.28	1.61	20.0	2.83	3.29	3.73	71.4	4.4	0	, 2	5.19			M D	פרחכ		0.01	07.0	0.57	0.77	1.17	1.54	1.94	7.0	3,17	3.53	3.93	4.29	79 7	5.03	. u	6.20	
NCSU=No	GLUC UTIL	1.19	0.59	0.78	0.78	0.68		0.84	98.0	0.8	O. 0	0.69	2 %	200	0.25		NCSU=No	GLUC	UTIL	;	1.08	2.0	0.70	0.80	0.79	0.74	0.81	6.63	28.0	0.72	0.79	0.73	0.70	0.77		0.78	
MEDVOL=352	ADJ RESIS	97.8	45.0 45.8	45.1	45.6	41.7	0.14	41.1	43.7	48.5	25.1	74.6	: '	- 8	5.89		MEDVOL=419	ADJ	RESIS	i	7.7	0.07	0.64	40.6	38.8	35.6	32.9		4.4.4	32.3	32.9	37.1	37.3	47.1	4. 7. C	56.6	
	ADJ FLOW	0.61	0.64	99.0	99.0	0.65	0.00	0.7	0.73	0.74	5.0	9.0	2 4	77	0.67	į		ADJ	FLOW	;	0.84	9 6	8 12	0.76	0.80	0.79	0.79	S 4		0.74	0.76	0.75	0.75	0.83	0.00	0.80	
GROUP=No Topical	VRE- SIST	56.3	30.5 21.1	30.6	30.9	28.3	8.72 20.4	27.9	59.6	32.9	55.5	37.1	2,4,0	0.14	46.5		GROUP=No Topical	VRE-	SIST		57.4		300	32.8	31.3	28.7	26.5	9.5	27.0	2,4	56.6	59.9	30.1	38.0	0.6	40.8	
GROUP=No	LACT	0.21	1.06	1.24	1.31	1.46	7.7	1.28	1.27	1.14	1.19	1.13	*	 		<u>:</u>	_	LACT	DEXT	i	0.38	, k	5 -	0.94	1.08	1.08	1.0		1.97	1.03	1.03	1.05	1.15	1.12	ς. .α.	0.9	
=10:00	DEXT ROSV	0.859	0.984	1.050	1.070	1.040	0.00	0.976	0.970	0.955	0.968	1.010	5 6	120	140	<u>:</u>	DOSETIME=10:30	DEXT	ROSV		0.754	0.00	878	0.836	0.837	0.854	0.822	0.818 0.618	0.822	0.871	0.819	0.854	0.865	0.858	0.8/8	0.883	
DOSETIME=10:00	LACT	0.117	0.248	0.366	0.387	0.383	0.572	0.378	0.368	0.336	0.309	0.291	191	10.0	114		DOSETIM	LACT	ATEV		0.189	267.0	246	0.363	0.390	0.373	0.384	0.580	786.0	38,0	0.391	0.372	0.380	0.379	0.542	0.346	
FLAPWT=21	DEXT ROSA	1.320	1.200	1.330	1.350	1.290	1.510	1.260	1.250	1.240	1.220	1.260	7.4	012.	22.0		FLAPWT=25.85	DEXT	ROSA		1.200	22.5	202	1.200	1.180	1.180	1.180	1.190	1,200	160	1.180	1.190	1.190	1.180	1.250	1.180	
	LACT	0.022	0.020	0.020	0.020	0.018	0.016	0.014	0.012	0.011	0.010	0.00		900	0.00			LACT	ATEA		0.021	0.022	20.0	0.021	0.021	0.020	0.022	0.021	0.021	0.00	0.019	0.020	0.007	0.018	0.019	0.017	
L PHASE=1	MEAN	0.91	0.95	0.98	0.97	0.96	76.0	1.04	1.08	1.10	.08	0.97	9 6		6.0	;	PHASE=1	MEAN	FLOW		 		70.0	0.95	0.0	0.98	0.98	6.0	<b>3</b> 5	8 8	0.9	0.94	0.93	1.03		0.99	
/SIDE=95-22-2-L	MED TEMP	37.6 36.1	35.9	35.5	35.7	35.7	35.4	35.7	35.7	35.7	36.4	35.8	0,0	7.00	3.5	:	SIDE=95-24-4-R	WED	TEMP		35.2	35.6	- 05.	36.0	35.9	36.0	36.1	36.0	36.1 7.7		36.1	36.1	36.1	35.6	36.2	36.4 36.4	
L/SIDE:	BP MEAN	9 62	8 8	88	30	27	27	3 8	32	36	38	36	٥ : د	- t	<b>4</b> 4	}	SIDE=9	B	MEAN		8 8	χ χ τ	5 6	M	31	82	92	<b>S</b> 3	9 6	3 %	3	28	82	39	55 5	5 <del>2</del>	
ANIMA	ART MEDPH	7.2	7.4	7.3	7.3	7.4	4.4	4.7	7.4	7.5	7.4			. r	* ^	:	ANIMAL/	ART	MEDPH		7.4	4.7	0.7	7.5	7.5	7.4	7.4	7.4	7. 4. n	3,4	7.4	7.5	7.3	7.5	9.1	7.5	
123/95	HUM1 DITY	30.0	42.1	42.0	0.04	7.07	40.0	39.5	40.4	40.2	37.8	39.2	0.0	4.0	0.07	) }		HIMI	DITY		40.0	40.1	2 2	39.0	40.1	37.8	36.3	35.2	24.5	2 %	34.2	36.8	35.7	36.4	55.1	35.1	
DATE=02/23/95	AIR	37.8 37.1	37.8	37.1	37.1	37.4	37.2	37.2	37.1	37.1	37.2	37.2	7.7	0.75	, oo k	2	DATE=03/01/95	ATR	TEMP																	37.5 37.5	
FLAPN0=2516	REL- Time	-0.73	-0.25	0.50	1.02	1.50	2.00	3.00	3.50	4.00	4.50	 8	٠. د. د	9 5	0.70	3		PFI -	TIME		-1.0 1.0	. o			0.50	1.00	1.50	2.00	2.50	9 6	9.0	4.50	2.00	5.50	6.00 5.00	6.50 7.90	
- FLAPN	ACTL TIME	9:16 9:31	9:45	10:30	11:01	11:30	12:00	13:00	13:30	14:00	14:30	15:00	05:51	16:00	12:50	3	FLAPN0=2517	ACTI	TIME		9:30	9:45	10:01	10:30	11:00	11:30	12:00	12:30	13:00	20.75	14:30	15:00	15:30	16:00	16:30	17:00 17:30	
	TARG	9:15 9:30	9:45	10:30	1:02	11:30	12:00	13:00	13:30	14:00	14:30	15:00	15:50	16:00	12:50	8:-		TABG	TIME		9:30	9:45	10:00	10.30	11:00	11:30	12:00	12:30	13:00	7, 10	14:30	15:00	15:30	16:00	16:30	17:00 17:30	

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

:			-		
	SLUC CUM	0.01 0.38 0.38 0.58 1.26 1.26 1.73 2.58 3.00 3.00 4.61 5.07 5.07 5.37		SULUC SU Suluc Suluc Suluc Suluc Suluc Suluc Suluc Suluc Suluc Suluc Suc Suluc Su Suluc Suluc Suluc Suluc Suluc Suluc Su Su Suluc Su Su Su Su Su Su Su Su Su Su Su S Su Su	0.00 0.05 0.05 0.05 0.05 0.05 0.05 0.05
NCSU=No	GLUC	0.82 0.69 0.91 0.91 0.83 0.73 0.73 0.73 0.73 0.73 0.73 0.73	NCSU=Yes	GLUC	0.88 0.97 0.90 0.85 0.85 0.53 0.53 0.53 0.53
MEDVOL=409	ADJ RESIS	47.3 47.3 47.3 47.3 40.1 40.1 40.5 40.5 40.5 40.5 40.5 40.5 40.5	MEDVOL=392	2	571.3 67.9.7 7.2.7.7 56.0 7.0.6 7.0.
	ADJ FLOW	0.84 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73		ADJ FLOW	0.77 0.80 0.77 0.77 0.77 0.77 0.77 0.77
GROUP=No Topical	VRE- SIST	37.7 34.0 37.7 31.6 31.2 31.2 28.6 28.9 31.2 28.3 33.2 41.3 32.2 31.9	GROUP=No Topical	VRE- SIST	38.33 37.52 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66 39.66
GROUP=	LACT	0.61 0.83 0.95 0.95 0.98 0.98 0.96 0.96 0.95	GROUP	LACT	0.39 0.62 0.90 0.90 0.93 1.22 1.37 1.37 1.37 1.39
DOSETIME=10:15	DEXT	0.906 0.962 0.930 0.817 0.819 0.825 0.855 0.855 0.855 0.856 0.875 0.895 0.895 0.897 1.070 1.070	DOSETIME=11:45	DEXT	0.892 0.872 0.903 0.903 0.909 0.814 0.814 0.755 0.837 0.931 0.955
DOSETIA	LACT	0.225 0.224 0.282 0.373 0.412 0.414 0.404 0.382 0.363 0.363 0.363 0.363 0.363 0.378 0.363 0.363 0.378	DOSETI	LACT	0.172 0.315 0.327 0.457 0.465 0.465 0.475 0.395 0.395 0.397
FLAPWT=25.8	DEXT	1.240 1.250 1.230 1.230 1.230 1.200 1.210 1.210 1.200 1.200 1.200 1.200 1.200 1.200 1.200	FLAPWT=25.98	DEXT	1.280 1.270 1.270 1.260 1.300 1.250 1.190 1.190 1.250 1.250 1.160 1.160
	LACT	0.020 0.021 0.021 0.021 0.021 0.019 0.018 0.018 0.016 0.016		LACT ATEA	0.022 0.022 0.022 0.022 0.022 0.022 0.021 0.021 0.021 0.021 0.021 0.021 0.021
. PHASE=1	MEAN	1.06 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	PHASE=1	MEAN FLOW	0.98 1.02 1.02 1.02 1.02 0.98 0.98 0.98 0.98 0.98
IDE=95-24-4-L	MED	33 33 33 33 33 33 33 33 33 33 33 33 33	DE=95-24-1-R	MED	39.7 38.2 37.8 37.8 37.9 37.9 37.9 37.9 37.9
/SIDE=9	BP MEAN	333333333333333333333333333333333333333	SIDE=9	BP MEAN	38 33 33 33 33 33 33 33 33 33 33 33 33 3
ANIMAL/S	ART Medph	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	ANIMAL/	ART Medph	4
701/95	HUMI DITY	22 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		HUMI DITY	37.5 38.5 38.5 38.5 38.7 37.5 37.5 37.5 37.5 37.5 37.5 37.5 37
DATE=03/01/95	AIR	35. 37.6. 37.6. 37.6. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0. 36.0.	DATE=03/16/95		40.4 38.0 38.0 38.5 38.7 38.7 38.7 38.7 38.7 38.7 38.7 38.7
FLAPNO=2518 [	REL- TIME	-1.00 -0.75 -0.50 -0.25 -0.00		REL- TIME	0.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00
FLAPNO	ACTL TIME	99.35 99.35	FLAPN0=2521	ACTL TIME	10:45 11:00 11:30 11:45 12:16 13:16 13:45 14:46 15:45 16:15 16:15 16:15
1	TARG	9:15 9:30 10:00 10:15 11:15 11:15 12:45 12:45 13:45 14:45 15:15 16:45 17:15		TARG	01111111111111111111111111111111111111

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	5.76		GLUC	0.01	0.35	0.50	1.00	1.56	1.93	2.5	3.20	3.82	4.24	4.80	, r	6.37	6.79	7.15		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	₩ C C	פרחכ	0.01	0.13	0.50	0.49	1.18	1.61	2.03	;
NCSU=Yes	GLUC	0.41	NCSU=Yes	GLUC	0.81	0.69 0.69	0.62	99.0	0.9	0.76	0.83 7.	0.97	1.25	0.82	1.12	<u>.</u> 5	0.98	78.0	0.73		NCSU=No -	GLUC	UTIL	0.37	0.47	0.7	0.7	0.94	0.84	9. 6 8. 6	;
MEDVOL=392	ADJ RESIS	9.25	MEDVOL=339	ADJ RESIS	58.2	47.7	45.9	51.0 5.7	38.4	6.67	47.9	6.44	45.7	42.1	46.2	7.07	38.7	56.8	41.7		MEDVOL=404	ADJ	RESIS	60.2	74.6	5.5	7.5	67.1	53.4	62.4 57.4	
	ADJ FLOW	0.71		ADJ FLOW	0.65	2.0	0.68	0.63	0.3	0.60	5,00	0.62	99.0	0.62	0.65	0.0	0.65	0.63	0.62		HD MED	ADJ	FLO	0.81	0.72	0.73	3.9	0.79	0.79	0.67	:
GROUP=No Topical	VRE- S1ST	36.0	GROUP≐No Topical	VRE- SIST	38.0	31.2 29.6	28.0	33.3	25.1	32.6	31.3 25.0	29.3	27.9	27.5	30.2	20.0 20.0	25.5	37.1	27.2		GROUP=3 mg H	VRE-	SIST	6.94	58.1	8. 50.	50.4 4.05	52.2	41.6	9.84	
GROUP=N	LACT	1.41	GROUP=1	LACT	0.68	78.0 98.0	0.97	96.0	1.04	1.10	1.26	1.24	0.95	1.34	6.0		1.14	1.19	1.43			LACT	DEXT	1.07	1.03	9:	5 8	.1	1.05	2.6	:
:=11:45	DEXT ROSV	0.990	E=11:15	DEXT	0.863	0.944	0.953	0.910	0.818	0.774	0.709	0.603	0.617	0.651	0.667	0.679	702	0.702	0.713		DOSETIME=9:45	DEXT	ROSV	1.030	0.999	0.891	0.898	0.811	0.859	0.794	3
DOSETIME=11:45	LACT ATEV	0.281	DOSETIME=11:15	LACT	0.289	0.285	0.308	0.348	0.437	0.466	0.540	0.636	0.601	0.591	0.564	0.00	0.554	0.521	0.551			LACT	ATEV	0.180	0.237	0.347	0.550	0.447	0.389	0.451	2
FLAPWT=25.98 continued)	DEXT ROSA	1.180	FLAPWT=29.51	DEXT	1.260	1.260	1.250	1.250	1.220	1.180	1.120	1.100	1.230	1.080	1.220	1.650	180	1.130	1.090	!	FLAPWT=25.2	DEXT	ROSA	1.180	1.210	1.200	1.210	1.200	1.210	1.210	2
	LACT	0.013		LACT	0.021	0.021	0.020	0.020	0.019	0.019	0.022	0.018	0.019	0.016	0.018	0.010	0.0	0.013	0.012		PHASE=2 F	LACT	ATEA	0.020	0.020	0.020	0.021	0.020	0.019	0.019	×
PHASE=1	MEAN	0.95	PHASE=1	MEAN	1.00		1.04	96.0	1.12	0.92	0.99	0.96	1.01	0.95	8	5.5	8	0.97	96.0			MEAN	FLOW	1.05	0.93	0.97	98.0	1.02	1.01	0.87	
AL/SIDE=95-24-1-R	MED	37.9	-24-1-L	MED TEMP	35.6	35.9	36.3	36.5	36.6	37.2	37.3	37.2	37.2	37.2	37.2	37.2	37.75	37.1	37.3		IMAL/SIDE=95-201-11-R	MED	TEMP	36.7	37.8	38.2	38.2 27.0	38.3	38.3	38.4	7.00
1DE=95	BP MEAN	34	:IDE=95	BP MEAN	38	% t	3 8	32	8 8	8	<del></del>	3 %	28	56	۶ ۱	ر د د	, x	3 2	92		-/SIDE=	8	MEAN	67	27	6 ;	5. 7. 7. 7.	23 2	75	<b>2</b> %	ţ
ANIMAL/S	ART MEDPH	7.6	ANIMAL/SIDE=95-24-1-L	ART MEDPH	7.4	7.4	7.4	7.5		7.5	7.5	7.4	7.5	7.4	7.4			2.5	7.5		ANIMA	ART	MEDPH	7.2	7.3	7.3	7.3	3.5	7.3	7.4	:
	HUMI DITY	33.7		HUMI	27.8	26.3	41.4	42.1	41.8	45.3	42.3	42.1	40.4	40.0	40.6	ν. υ. ο	70.0	40.7	41.2		/22/95	HUMI	DITY	38.8	38.5	35.3	35.4 25.8	35.0	35.2	34.7	2
DATE=03/16/95	AIR TEMP	38.4	DATE=03/16/95	AIR	35.2	36.3 76.3	37.1	37.3	37.4	37.8	37.9	37.7	37.7	37.7	37.7	56.6	37.7	37.8	37.7		DATE=03/22/95	AIR	TEMP	37.7	37.1	38.9	38.9	38.9	39.0	39.0	24.0
	REL- Time	7.00		REL- TIME	-0.97	-0.73	-0.25	9.6	1.02	1.50	2.00	3.00	3.50	4.00	4.50	8.5	20.4	6.50	7.00		FLAPN0=2523	REL-	T1%	-1.00	-0.75	-0.50	- 5.5	0.50	1.00	1.50	
FLAPN0=2521	ACTL TIME	18:45	FLAPNO=2522	ACTL TIME	10:17	10:31 10:45	11:00	11:15	12:16	12:45	13:15	14:15	14:45	15:15	15:45	16:15	17:15	17:45	18:15		- FLAPN	ACTL	TIME	8:45	9:00	9:15	9:30	10:15	10:45	11:15	C#:-
	TARG	18:45		TARG		10:30		11:15														TARG	TIME							11:15	
!			- :																		i										

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS
USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	2.82 3.45 3.45 4.06 4.38 4.66 5.57 5.57 5.57 6.16	1	ernc orna	0.01 0.12 0.24 1.22 1.22 1.22 1.37 2.37 3.41 3.58 4.29 4.29
NCSU=No -	GLUC UTIL	0.77 0.62 0.63 0.63 0.64 0.55 0.65 0.63	NCSU=Yes	UTIL	0.36 0.45 0.47 0.61 0.77 0.50 0.50 0.33 0.33 0.35
MEDVOL=404	ADJ RESIS	69.2 66.0 65.0 65.0 57.1 57.5 64.9 58.0 64.9 67.2	MEDVOL=381	RESIS	38.5 38.5 38.5 38.5 38.5 38.5 38.5 57.9 57.9 57.9 56.1 56.1
	ADJ FLOW	0.75 0.06 0.77 0.77 0.77 0.78 0.78 0.78	HD MED	FLOW	0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03
GROUP=3 mg HD	VRE- SIST	5.05 5.05 5.05 5.05 5.05 5.05 5.05 5.05		SIST	28.3 26.8 26.1 26.1 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0
	LACT	1.00 0.97 1.08 1.09 1.09 1.08 1.03 1.03		DEXT	0.97 1.06 1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07
DOSETIME=9:45	DEXT	0.893 0.928 0.913 0.954 0.962 0.963 0.972 0.972 0.972	DOSETIME=9:29	ROSV	0.966 0.929 0.915 0.837 0.789 0.744 0.746 0.749 0.859 0.916 0.925 1.040 1.050 1.050
	LACT	0.356 0.331 0.331 0.3316 0.299 0.291 0.290 0.272 0.275		ATEV	0.237 0.291 0.316 0.422 0.439 0.494 0.496 0.372 0.372 0.315 0.210 0.113
FLAPWT=25.2 nued)	DEXT	1.230 1.220 1.220 1.220 1.220 1.230 1.230 1.240 1.240	FLAPWT=35.47	ROSA	1.190 1.200 1.200 1.200 1.210 1.210 1.210 1.210 1.220 1.230 1.230 1.230 1.230 1.230
PHASE=2 FLAPW (continued)	LACT	0.019 0.018 0.017 0.013 0.012 0.010 0.009 0.005	PHASE=2 FL	ATEA	0.020 0.021 0.020 0.020 0.020 0.019 0.019 0.016 0.016 0.015 0.015 0.013 0.013 0.013
	MEAN	0.97 0.95 0.95 0.99 1.01 0.98 0.93 0.93	i	FLOW	0.98 0.97 1.09 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0
MAL/SIDE=95-201-11-R	MED TEMP	38.4 38.1 38.1 38.0 37.0 37.1 37.1 37.1	'SIDE=95-201-11-L	MED	35.8 36.7 36.8 36.8 36.8 36.1 36.1 36.1 36.1 36.1 36.1 36.1 36.1
L/SIDE:	BP MEAN	646746666666666666666666666666666666666	•	BP MEAN	43 43 44 44 44 44 44 44 44 44 44 44 44 4
ANIMA	ART MEDPH	7.4 4.7 4.7 4.7 7.5 7.5 7.5 7.5 7.5 7.5	ANIMAL	ART Medph	
/22/95	HUM1 DITY	35.22 35.22 35.23 35.24 35.33	.22/95	HUMI	4.1. 4.2.0. 4.5.0.0. 4.5.0. 4.5.0. 4.5.0. 4.5.0. 4.5.0. 4.5.0. 4.5.0. 4.5.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0. 4.0.0.0. 4.0.0.0. 4.0.0.0.0
DATE=03/22/95	AIR TEMP	38.8 38.7 38.7 37.7 37.7 37.7 37.7 37.8 37.8	DATE=03/22/95	AIR	36.9 37.6 37.6 37.6 37.5 37.5 37.5 36.7 36.7 36.7 36.7 36.7 36.7 36.7 36.7
	REL- TIME	8.00 8.00 8.00 8.00 8.00 8.00		REL- TIME	0.98 0.18 0.01 0.01 0.02 0.03 0.05
- FLAPNO=2523	ACTL TIME	12:15 12:148 13:15 13:15 14:15 14:15 15:15 16:15 17:16	FLAPN0=2524	ACTL TIME	8:30 9:00 9:18 9:29 10:00 11:30 11:30 12:30 12:30 14:30 15:30 17:01 17:01
1	TARG	12:15 13:15 13:15 14:15 14:15 15:15 16:15 16:15 17:15		TARG	8:30 9:45 9:15 9:15 9:30 10:00 11:00 12:30 12:30 14:00 15:00 15:00 15:00 15:30 17:00 17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.01	0.20	0.38	0.59	0.78	1.37	1.85	2.29	2.78	3.56	3.71	4.13	4.56	4.97	5.36	5.73	6.11	9.44	6.77	7.08	7.20
NCSU=Yes	GLUC UTIL	0.77	0.74	0.73	0.81	0.82	1.15	0.95	0.89	0.98	96.0	0.89	0.84	98.0	0.82	0.78	0.78	0.72	29.0	0.65	0.62	0.24
MEDVOL=433	ADJ RESIS	53.3	85.7	52.6	48.7	45.1	38.9	34.6	40.2	40.0	38.1	40.8	34.2	41.0	45.9	37.0	38.4	39.1	43.9	44.0	41.4	43.1
	ADJ FLOW	0.79	0.81	0.78	0.78	0.78	0.77	0.81	0.80	0.80	0.81	0.78	0.73	0.83	0.84	0.84	0.86	0.82	0.84	0.82	0.82	0.79
GROUP=3 mg HD	VRE- SIST	4.4	71.5	43.9	40.6	37.6	32.4	28.9	33.5	33.3	31.8	34.0	58.6	34.2	35.8	30.8	32.0	32.7	36.6	36.7	34.5	36.0
	LACT	0.64	0.83	0.0	0.94	0.98	0.72	0.97	1.05	0.99	1.03	1.02	1.00	0.99	0.98	0.97	96.0	0.93	0.97	0.93	0.0	5.49
DOSETIME=10:44	DEXT ROSV	0.888	906.0	0.894	0.867	0.852	0.847	0.834	0.831	908.0	0.821	0.824	0.849	0.867	0.888	0.913	0.922	0.939	0.958	0.969	0.971	0.971
	LACT	0.224	0.269	0.302	0.342	0.358	0.377	0.388	0.399	0.411	0.411	0.390	0.388	0.344	0.322	0.305	0.294	0.278	0.261	0.251	0.231	0.257
FLAPWT=23.72	DEXT	1.210	1.210	1.210	1.210	1.200	1.340	1.220	1.200	1.210	1.210	1.200	1.230	1.210	1.210	1.220	1.220	1.230	1.220	1.230	1.220	1.070
	LACT	0.018	0.018	0.018	0.018	0.017	0.020	0.014	0.013	0.011	0.010	0.008	0.007	900.0	0.007	0.008	0.007	0.007	0.007	0.008	900.0	0.010
-R PHASE=2	MEAN	0.95	0.97	0.94	0.94	0.93	0.93	0.97	96.0	96.0	0.98	0.94	0.88	9.0	1.01	1.01	1.03	0.98	1.01	0.98	0.99	0.95
'S1DE=95-202-7-R	MED	35.9	36.9	36.2	36.2	36.2	36.2	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.2	36.1	36.1	36.1	36.1	36.0
/SIDE=9	BP MEAN	45	69	41	38	32	20	28	32	35	31	35	23	34	36	31	33	32	37	36	34	34
ANIMAL	ART MEDPH	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.7	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.0
23/95	HUMI	36.8	34.8	35.2	35.4	35.5	35.0	35.7	35.7	34.6	34.0	33.9	34.2	34.2	34.2	34.3	33.9	35.1	34.9	35.3	34.0	33.9
DATE=03/23/95	AIR	36.7	37.6	37.0	37.0	37.0	36.9	36.9	36.8	36.8	36.8	36.9	36.8	36.8	36.9	36.9	36.9	36.9	36.9	3,4	36.9	36.9
	REL- TIME	-0.98	-0.73	-0.48	-0.23	0.00	0.52	1.02	1.52	2.02	2.52	3.02	3.52	4.02	4.52	5.02	5.52	6.02	6.52	7.02	7.52	8.02
FLAPN0=2525	ACTL TIME	6:45	10:00	10:15	10:30	10:44	11:15	11:45	12.15	12:45	13:15	13.45	14:15	57-71	15:15	15:45	16-15	16-45	17:15	17.45	18:15	18:45
	TARG	9:45	10:00	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13.45	14-15	14-45	15:15	15:45	14.15	16.45	17.15	57.71	18:15	18:45

	OU10 CUM	0.01	0.20	0.20	0.48	0.59	0.71	0.83	0.92	0.98	1.05	1.10	1.14	1.17	1.19
NCSU=No	GLUC	0.25	0.37	0.27	0.31	0.25	0.25	0.23	0.18	0.11	0.16	0.10	0.08	90.0	0.04
MEDVOL=450	ADJ RESIS	70.3	84.7	2 	80.8	47.6	43.8	45.7	45.3	39.0	38.8	41.7	37.4	36.9	34.5
MEDV	ADJ FLOW	0.85	0.82	0.80	0.85	0.82	0.87	0.87	0.88	0.87	0.85	98.0	0.83	0.84	0.00
GROUP=E tOH	VRE- SIST	60.9	73.4	2.5	20.0	41.3	38.0	37.0	36.6	33.8	33.7	36.2	32.5	32.0	30.0
	LACT	0.60	0.89	80.1	69.	1.22	1.15	1.15	1.54	1.96	1.19	1.24	1.57	1.53	2.40
DOSETIME=10:29	DEXT	1.090	1.020	1.070	1.060	1.100	1.090	1.100	1.126	1.150	1.150	1.170	1.180	1.190	1.190
	LACT ATEV	0.091	0.187	0.159	0.180	0.150	0.153	0.140	0.142	0.110	0.108	0.073	0.073	0.056	0.058
FLAPWT=28.59	DEXT	1.210	1.210	1.200	1.210	1.210	1.210	1.210	1.210	1.200	1.230	1.220	1.220	1.220	1.210
PHASE=2	LACT	0.019	0.018	0.018	0.017	0.016	0.015	0.013	0.013	0.012	0.013	0.011	0.010	0.010	0.010
	MEAN	0.99	0.94	6.6	- 8	0.95	1.00	1.00	1.01	1.01	0.98	1.00	96.0	0.97	1.04
/SIDE=95-202-7-L	MED TEMP	35.9	35.9	35.9	2, 50 2, 50 2, 60 2, 60	36.9	37.1	37.1	37.1	37.1	36.9	37.1	37.0	36.9	36.9
Ĵ	BP MEAN	09	69	2;	<b>- 8</b>	36	38	37	37	34	33	36	31	31	31
ANIMA	ART Medph	7.4	7.4	7.4	, v	.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
DATE=03/23/95	HUMI	35.3	35.0	35.0	55.0 4.45	34.4	34.4	35.0	34.9	34.1	34.5	33.3	34.1	33.7	33.8
DATE=0	AIR	37.0	37.4	37.4	37.6	37.5	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.7
FLAPNO=2526	REL- TIME	-0.98	-0.48	-0.23	0.00	1.02	1.52	2.05	2.52	3.07	3,52	4.02	4.52	5.02	5.52
FLAP	ACTL TIME	05:6	10:00	10:15	10:29	11:30	12:00	12:30	13:00	13:33	14:00	14:30	15:00	15:30	16:00
	TARG TIME	9:30	10:00	10:15	10:30	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15-30	16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

;			:				;	
1 1 1 1 1	CUM	1.20 1.21 1.25 1.25		OUN CUM CUM	0.01 0.32 0.88 1.50 2.10 2.64 3.11	6.73 7.79 7.79 7.79 7.79 7.79 7.79 7.79 7	CUM	0.01 0.28 0.58 0.88 1.20
NCSU=No	GLUC	0.00	NCSU=Yes	GLUC UT1L	1.51 1.25 1.12 1.24 1.21 1.08 0.94 0.80	0.62 0.57 0.56 0.56 0.56 0.55 0.55	NCSU=No GLUC UTIL	1.11 1.07 1.20 1.21 1.28
MEDVOL=450 A	ADJ RESIS	36.9 36.1 36.6 35.2 36.9	MEDVOL=245	ADJ RESIS	67.2 71.3 74.3 73.5 71.7 71.0 88.3	80.8 81.7 82.5 83.4 82.1 78.0 74.5	MEDVOL=316 NDJ ADJ .OW RESIS	58.7 58.0 51.5 55.6 54.7 58.2
MEDVO	ADJ FLOW	0.84 0.86 0.88 0.88		ADJ	0.49 0.46 0.46 0.46 0.46 0.46 0.46	0.46 0.45 0.45 0.45 0.45 0.45	HD MEDY ADJ FLOW	0.63 0.62 0.59 0.60 0.58
GROUP=EtOH	VRE- SIST	32.0 31.3 31.7 30.5 32.0	GROUP=3 mg HD	VRE- SIST	31.7 27.8 33.5 33.5 33.5	38.1 38.6 38.7 38.7 35.0 35.2	GROUP=3 mg H ACT VRE- EXT SIST	35.7 31.4 33.8 33.3
	LACT	3.00		LACT	0.95 1.06 1.08 1.08 1.08	1.06	٠, ۳	0.82 0.92 0.97 0.94 0.95
DOSETIME=10:29	DEXT	1.190 1.220 1.210 1.190	DOSETIME=11:45	DEXT	0.629 0.697 0.688 0.742 0.742 0.803 0.856	0.914 0.926 0.938 0.945 0.957 0.959 0.959	DOSETIME=11:15 ACT DEXT LATEV ROSV D	0.676 0.687 0.632 0.611 0.601
	LACT	0.038 0.046 0.044 0.042 0.030		LACT	0.550 0.522 0.529 0.510 0.517 0.464 0.392	0.292 0.268 0.256 0.244 0.237 0.232 0.222	_ ~	0.419 0.454 0.530 0.547 0.572 0.572
FLAPWT=28.59 inued)	DEXT	1.200 1.220 1.220 1.220	FLAPWT=23.11	DEXT	1.190 1.180 1.170 1.170 1.180	1.170 1.170 1.180 1.170 1.170 1.160	FLAPWT=26.96 ST DEXT EA ROSA	1.160 1.160 1.160 1.170 1.170
PHASE=2 FLAPW (continued)	LACT	0.008 0.007 0.008 0.007		LACT	0.019 0.019 0.017 0.016 0.014 0.010	0.009 0.009 0.008 0.008 0.008 0.008	PHASE=2 FLA SAN LACT .OW ATEA	0.021 0.020 0.020 0.020 0.020
	MEAN	0.97 0.99 0.95 1.02 0.97	-R PHASE=2	MEAN	1.04 0.98 0.98 0.98 0.98 0.99	0.97 0.95 0.95 0.97 0.96 1.00		1.04 1.02 1.02 0.98 0.99
SIDE=95-202-7-L	MED TEMP	37.0 37.1 36.9 36.9 36.9	DE=95-206-6-R	MED	35.23.33.33.33.33.33.33.33.33.33.33.33.33.	57. 57. 57. 57. 57. 57. 57. 57. 57. 57.	DE=95-205-6-R P MED ME :AN TEMP FI	36.2 36.4 36.6 36.6 36.8
AL/SIDE	BP MEAN	31 31 31 31	/SIDE=9	BP MEAN	£2233450 20333450 203333450 2033333333333333333333333333333333333	37 37 37 37 37 35 35 35		3333333
ANIMAL/	ART MEDPH	7.5	ANIMAL/SI	ART MEDPH	7.55	7.7.7.5 7.7.5 7.7.5 7.5 7.5 7.5 7.5 7.5	ANIMAL/S ART ( MEDPH MI	7.7 7.5 7.5 7.5 7.5
3/23/95	HUM1 DITY	34.0 33.8 34.0 34.0	29/95	HUMI	36.7 33.7 33.1 35.3 35.3 34.3 34.3	32.0 34.0 34.8 33.6 34.6 34.6	30/95 HUMI DITY	36.3 35.2 34.9 32.1
DATE=03/23/95	AIR	37.8 37.7 37.7 37.7	DATE=03/29/95	AIR TEMP	36.8 37.6 37.6 37.6 37.6 37.6 37.6	37.5 37.6 37.6 37.6 37.6 37.6	DATE=03/30/95 AIR HUMI TEMP DITY	37.8 37.0 37.2 37.2 37.4
- FLAPNO=2526	REL- TIME	6.02 6.52 7.02 7.52 8.02	FLAPN0=2527 I	REL- TIME	-0.25 0.00 1.50 2.50 3.00 3.50	4.00 4.50 5.00 6.50 7.50 7.50	FLAPNO=2529 ACTL REL- TIME TIME	-1.00 -0.75 -0.50 -0.25 0.00
··· FLAP	ACTL TIME	16:30 17:00 17:30 18:00	- FLAPNC	ACTL TIME	11:30 11:45 12:45 12:45 13:45 13:45 14:15 14:45	15:45 16:15 16:45 17:45 17:45 18:45 19:15 19:46	- FLAPNG ACTL TIME	10:15 10:30 10:45 11:00 11:15
	TARG	16:30 17:00 17:30 18:00 18:30		TARG	11.30 11.45 12.15 13.15 13.15 14.15 15.15	15:45 16:15 17:15 17:45 18:15 19:45 19:45	TARG	10:15 10:30 10:45 11:00 11:15 11:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	UNC CUM	2.40 2.40 3.38 3.38 4.32 5.17 5.17 5.55 6.64 6.64	7.74	 	OLUC CUM	0.01 0.22 0.22 0.27 1.45 1.58 1.58 1.58 1.58 1.58 1.58 1.58 1.5
NCSU=No -	GLUC	1.18 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.63	NCSU=Tes	GLUC	0.85 0.99 0.99 0.98 0.98 0.98 0.07 0.07 0.05 0.05 0.05 0.05 0.05 0.05
MEDVOL=316	ADJ RESIS	62.2 69.5 67.3 64.1 70.7 71.3 71.3 64.7	-		ADJ RESIS	48.4 48.7 47.0 47.0 47.0 47.0 38.0 47.1 47.1 47.1 47.1 57.0 57.0 57.0 57.0 57.0 57.0 57.0 57.0
	ADJ FLOW	0.58 0.55 0.63 0.63 0.64 0.59 0.59 0.59	0.59 55.0	MEDVO	ADJ FLOW	0.70 0.68 0.67 0.67 0.65 0.63 0.63 0.65 0.65 0.65 0.65
GROUP=3 mg HD	VRE- SIST	37.9 36.5 36.5 47.0 39.0 43.1 43.1 43.1 43.1	33.8	GKOOP=ETON	VRE- SIST	33.5 33.5 33.3 33.3 33.3 27.7 27.7 27.7 27.7 27.7
	LACT	1.03 1.02 1.00 0.98 0.99 1.00 1.04 1.04	0.4		LACT	1.03 1.03 1.03 1.03 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04
DOSETIME=11:15	DEXT	0.601 0.662 0.662 0.739 0.773 0.801 0.810 0.837	0.906	DUSE 1 1 ME = 10: 28	DEXT ROSV	0.688 0.671 0.633 0.605 0.586 0.576 0.576 0.572 0.668 0.710 0.727 0.806 0.928 0.928
	LACT	0.593 0.522 0.433 0.433 0.372 0.372 0.372 0.367	100		LACT	0.482 0.515 0.545 0.569 0.575 0.628 0.628 0.570 0.570 0.574 0.574 0.574 0.574 0.574 0.574 0.575 0.576 0.577
FLAPWT=26.96 ontinued)	DEXT	0.1.1.0 0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1.170	FLAPWI=55.55	ROSA	1.130 1.150 1.150 1.150 1.150 1.160 1.180 1.180 1.170 1.170 1.170 1.170 1.170 1.170
E=2 FLAPWT= (continued)	LACT	0.017 0.017 0.007 0.007 0.005 0.006 0.006	วพพ	PHASE=2 FL	LACT	0.019 0.020 0.020 0.019 0.018 0.015 0.015 0.009 0.009 0.008 0.008
R PHASE=2	MEAN	0.95 0.95 0.98 0.098 0.98 0.99	, 0, 0,		MEAN	1.02 0.99 1.02 1.02 1.03 1.03 0.94 0.94 0.97 1.00
AL/SIDE=95-205-6-R	MED	36.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8	36.8	/SIDE=93-203-6-L	MED	35.8 36.7 37.1 37.1 37.2 37.2 37.2 37.3 37.3 37.3 37.3 37.3
/SIDE=9	8P MEAN	388 37 T T T T T T T T T T T T T T T T T T	333	L/S1DE	BP MEAN	23 23 23 23 23 23 23 23 23 23 23 23 23 2
ANIMAL	ART MEDPH	~		ANIMAL	ART Medph	2 2 2 2 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5
30/95	HUMI DITY	34.0 33.0 33.0 33.0 33.0 33.0 33.0 33.0	36.9	ck/nc/	HUMI	34.4.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5
DATE=03/30/95	AIR TEMP	W 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	37.3	<b>UAIE=U3/3U/Y</b> 3	AIR	36.9 37.8 37.9 38.0 38.1 38.1 37.7 37.7 37.9 38.0 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1
	REL- TIME	6.1.9.0 6.1.9.0 6.1.9.0 6.1.0	7.75	0502=	REL- TIME	6.03 6.03 6.03 6.03 6.03 7.03 7.03 7.03 8.03
FLAPN0=2529	ACTL TIME	12:15 13:15 13:15 14:15 15:15 16:15 17:15 17:15	18:45 19:00	- FLAPNU=2330	ACTL TIME	9:30 9:45 10:10:00 11:30 11:30 11:30 12:30 14:30 14:30 15:30 16:30 17:30 17:30 18:30
	TARG	22222222222222222222222222222222222222			TARG	9:30 10:00 10:15 10:00 11:30 11:30 12:30 14:30 14:30 15:30 15:30 16:30 17:30 18:00 18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	OLUC NUO	0.01 0.23 0.38 1.75 1.25 1.25 1.45 1.65 1.65 1.65 1.65 1.65 1.65 1.65 1.6	CUM GLUC 0.01 0.01 0.01 0.01 0.26 0.26 0.78 0.78 1.17 1.15
NCSU=Yes	GLUC	0.70 0.69 0.69 0.73 0.73 0.73 0.74 0.74 0.75 0.22 0.22 0.22 0.22 0.23	NCSU=No GLUC UTIL 0.00 0.00 0.00 0.33 0.34 0.35 0.35 0.35 0.15 0.15 0.15
_	ADJ RESIS		0 0-000-889
MEDVOL=370	ADJ FLOW	0.66 0.66 0.65 0.65 0.67 0.67 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65	ADJ ADJ FLOW RESIDE ADJ ADJ FLOW RESIDE ADJ ADJ FLOW RESIDE AD
GROUP=E tOH	VRE- SIST	40.0 43.1 40.2 338.7 338.7 337.7 337.7 44.5 45.7 48.6 48.6 48.6 48.7 55.1 55.1 57.1 57.1 57.1 57.1 57.1 57	GROUP=EtOH  1.1 VRE- 1.2 SIST  63.0 86.0  93.0 92.0  92.0 80.0  92.0 80.0  93.0 47.0  93.0 47.0  94.0 91.0  94.0 91.0
	LACT	V0000-0000N-V00N0	LACT DEXT DEXT 1.34 1.34 1.13 1.13 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
DOSETIME=11:45	DEXT	0.851 0.830 0.889 0.785 0.775 0.775 0.775 0.947 0.993 1.000 1.060 1.060	DOSETIME=11:  CCT DEXT  EV ROSV  134 1.150  123 1.160  124 1.150  125 1.160  127 1.150  127 1.150  128 1.160  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060  129 1.060
	LACT ATEV	WWW444444WWUUHHHHHH	<b>2</b>
FLAPWT=25.33	DEXT	1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.180 1.180	PEXT PEXT PEXT PEXT PEXT PEXT PEXT PEXT
	LACT	00004000000000000000000000000000000000	N. LACT N. ATEA N. O.019 0.017
-R PHASE=2	MEAN	_ φ'φ' α΄ α΄ φ' φ' φ' α΄	
MAL/SIDE=95-22-4-R	MED	38.8 38.8 337.1 337.1 337.1 337.1 34.9 36.9 36.9 36.9	MIMAL/SIDE=95-22-4-L  T BP MED
AL/SIDE	BP MEAN	866666666666666666666666666666666666666	AL/SIDE BP MEAN 63 86 92 93 92 95 55 55 50 47 47 47 47
ANI	ART Medph	*******	A AB 7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
DATE=04/05/95	HUMI DITY	32.9 31.7 30.8 30.8 30.9 30.9 30.9 30.9 31.5	AIR HUMI TEMP DITY 36.9 39.6 36.0 37.8 35.2 36.0 37.1 33.0 37.1 31.8 36.4 33.1 36.9 31.9 37.1 32.3 37.1 32.3 37.2 31.7 37.2 31.7 37.2 33.8
DATE=0	AIR	23.72.72.72.72.72.72.72.72.72.72.72.72.72.	AIR AIR TEMP 36.9 36.9 35.2 35.1 37.1 37.1 37.1 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2
FLAPN0=2531	REL- TIME	2.1.0.75 0.00 0.00 0.00 0.00 0.00 0.00 0.00	FLAPNO=2532 TT REL- ME TIME 15 -0.98 30 -0.73 45 -0.48 00 0.77 30 1.27 00 2.77 30 2.27 00 2.77 30 4.27 30 4.27 30 4.27
FLAP	ACTL TIME	10:44 11:100 11:11:100 12:11:15 13:15:15 14:15 14:15 15:15 16:15 1	ACTL TIME 10:15 10:35 10:45 11:00 11:45 11:45 12:30 12:30 13:30 14:30 15:30 16:00
	TARG	10:45 11:00 11:15 11:30 11:45 12:45 13:45 14:45 15:15 16:45 16:45 18:45 19:45	TARG 10:15 10:15 10:45 11:06 11:45 11:45 12:30 12:30 12:30 12:30 12:30 12:30 12:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

;			į		<u> </u>		
	SUNC	1.49 1.55 1.61 1.69 1.74		OLUC MUD	0.01 0.05 0.05 0.07 0.07 1.18 1.08 1.08 1.08 1.08 1.08 1.08 1.08	OLUG	0.01
NCSU=No	GLUC	0.15 0.13 0.13 0.15 0.11	NCSU=Yes	GLUC UT1L	0.00 0.15 0.37 0.58 0.68 0.71 0.76 0.77 0.67 0.67 0.67 0.67 0.69 0.61 0.52 0.52 0.48	GLUC UTIL	0.32
	ADJ RESIS	59.1 55.3 46.5 44.0		ADJ RESIS	84 66.9 89 47.1 89 47.1 89 45.1 87 42.6 88 45.1 88 42.0 80 40.2 88 39.7 84 30.2 87 35.5 88 36.8 88 39.7 84 30.2 87 36.8	ADJ RESIS	56.6 56.6
MEDVOL=413	ADJ FLOW	0.80 0.80 0.80 0.80 0.80	MEDVOL=467	ADJ FLOW		ADJ FLOW	0.83
	VRE- SIST	47.0 44.0 44.0 37.0 35.0	GROUP=EtOH	VRE- SIST	60.2 79 42.4 62.4 64.5 79 42.4 64.6 64.6 64.6 64.6 64.6 64.6 64.6	VRE- SIST	47.0 47.0
14 GROJ	LACT	0.93 1.38 1.00 0.84 1.10		LACT		LACT	1.37
DOSETIME=11:14 GROUP=EtOH	DEXT	1.110 1.120 1.120 1.110 1.120	DOSETIME=11:00	DEXT	148 1.140 268 1.070 3 353 0.973 1 369 0.914 1 397 0.856 1 432 0.777 1 439 0.769 1 448 0.769 1 448 0.769 1 448 0.788 1 424 0.798 1 401 0.806 1 401 0.806 1 401 0.806 1 509 0.916 1 340 0.846 1 370 0.846 1	DEXT	1.020
	LACT	0.070 0.073 0.064 0.062 0.058		LACT		LACT	0.212
PHASE=2 FLAPWT=27.18 (continued)	DEXT	1.180 1.170 1.180 1.180 1.170	FLAPWT=30.39	DEXT	93 0.019 1.130 0.09 0.019 1.150 0.09 0.019 1.160 0.09 0.019 1.160 0.09 0.018 1.160 0.09 0.018 1.160 0.09 0.015 1.150 0.00 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.160 0.011 1.170 0.011 1.170 0.012 0.011 1.170 0.00 0.011 1.170 0.00 0.00	DEXT	1.160
SE=2 FLAPWT (continued)	LACT	0.005 0.004 0.003 0.003 0.003	PHASE=2 FL	LACT	0.019 0.019 0.019 0.016 0.015 0.011 0.011 0.011 0.008 0.008 0.006 0.006	LACT	0.020
	MEAN	000000		MEAN		MEAN FLOW	1.00
SIDE=95-22-4-L	MED	36.5 36.4 36.4 36.4 36.4	ANIMAL/SIDE=95-207-6-R	MED	56 36.8 0.35.8 0.35.6 0.35.8 0.35.6 0.35.7 0.35.7 0.35.7 0.35.7 0.35.8 0	MED	35.9
L/SIDE	BP MEAN	44 44 37 35 35	./SIDE=	BP MEAN	455 456 457 457 457 457 457 457 457 457 457 457	BP	25 25
ANIMAL/	ART Medph	4.7.7.7.7.7.4.4.4.4.4.7.7.7.7.7.7.7.7.7	ANIMAL	ART MEDPH	7.44 7.44 7.44 7.43 7.44 7.44 7.44 7.44	ART MEDPH	7.3
;/02/95	HUMI	34.7 31.3 35.8 32.0 34.3	/06/95	HUMI DITY	35.7 31.9 33.9 33.7 33.1 33.1 33.1 35.8 35.9 35.9 35.9 35.9 36.9 36.9	HUMI DITY	40.0
DATE=04/05/95	AIR TEMP	37.2 37.2 37.2 37.1 37.2	DATE=04/06/95	AIR	38.4 36.7 35.2 37.3 31.9 37.5 33.9 37.4 33.7 37.4 33.1 37.4 33.1 37.4 33.1 37.4 33.1 37.5 34.6 37.5 34.6 35.4 37.5 35.9 37.5 35.9 37.5 35.9 37.5 35.9 37.2 38.0 DATE=04/06/95	AIR	36.7 37.3
- FLAPNO=2532	REL- TIME	5.77 6.27 6.77 7.27 7.77 8.27	FLAPN0=2533	REL- TIME		REL- TIME	-1.00
FLAPI	ACTL TIME	17:00 17:30 18:00 18:30 19:00	- FLAPN	ACTL TIME	10:00 -1.00 10:15 -0.75 10:45 -0.25 11:00 0.00 11:30 0.50 12:30 1.50 13:30 2.50 14:30 3.00 14:30 3.00 14:30 4.00 15:30 4.00 16:30 5.00 16:30 5.00 17:00 6.50 18:30 7.50	ACTL TIME	9:45 10:00
	TARG	17:00 17:30 18:00 18:30 19:00	1	TARG	10:00 10:15 10:15 10:45 11:30 11:30 12:30 12:30 14:30 14:30 16:00 16:30 17:30 18:00 18:00 18:00 18:00	TARG	9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.25 0.41 0.59 1.38 1.81 2.24	2.69 3.18 3.48 3.78 4.29 4.29	4.62 4.76 4.90 5.02 5.13	CUM	0.01 0.11 0.23 0.23 1.27 1.27 1.87 2.69 2.69 3.24 3.24
NCSU=Yes	GLUC	0.52 0.64 0.73 0.80 0.78 0.84	0.83 0.74 0.60 0.54 0.54 0.39	0.27 0.27 0.25 0.25	GLUC UTIL	0.31 0.39 0.47 0.58 0.58 0.59 0.50 0.50
MEDVOL=431	ADJ RESIS	53.0 48.2 42.1 44.6 48.2	50.6 51.8 54.2 53.0 53.0		MEDVOL=437 R ADJ ADJ LOW RESIS	33.8 33.9 33.6 33.6 33.7 33.7 33.7 33.7 33.7 33.7
	ADJ FLOW	0.83 0.83 0.83 0.83	0.83 0.83 0.83 0.83	0.83 0.83 0.83 0.83	ADJ FLOW	0.83 0.80 0.83 0.83 0.85 0.91 0.92 0.92 0.92 0.93
=3 mg HD	VRE- SIST	44.0 38.0 40.0 35.0 37.0 38.0	42.0 43.0 45.0 46.0 38.0	36.0 35.0 34.0 34.0	VRE- SIST	29.8 29.6 29.6 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0
GROUP=3	LACT	1.26 1.09 1.09 1.09	0.97 1.06 1.14 1.05 1.05	1.08 1.01 0.97 1.05	LACT DEXT	1.04 0.99 0.99 1.00 1.00 1.04 1.04 1.05 0.99 0.99
DOSETIME=10:45	DEXT	0.921 0.869 0.841 0.809 0.807 0.759	0.762 0.795 0.845 0.906 0.977	1.060 1.070 1.060 1.060 1.070	ME=10:29 DEXT ROSV	0.947 0.924 0.859 0.859 0.847 0.847 0.842 0.864 0.863 0.863
	LACT	0.308 0.337 0.365 0.381 0.407 0.407	0.390 0.373 0.323 0.283 0.276 0.203		LACT ATEV	0.208 0.245 0.267 0.303 0.319 0.317 0.335 0.343 0.343 0.357 0.273
PHASE=2 FLAPWT=26.35 (continued)	DEXT	1.150 1.160 1.160 1.150 1.140	1.160	1.180 1.190 1.180 1.170 1.170	FLAPWI=32.79 ACT DEXT TEA ROSA	1.130 1.150 1.150 1.150 1.150 1.150 1.150 1.150
=2 FLAPWT= (continued)	LACT	0.019 0.018 0.017 0.019 0.013	0.009 0.008 0.008 0.008 0.008	0000		0.018 0.018 0.018 0.017 0.017 0.017 0.017 0.010 0.009 0.009
	MEAN	600000000000000000000000000000000000000	6888888	1.00	PHASE=Z MEAN FLOW	0.94 0.95 0.98 0.098 1.05 1.05 1.06 0.99
IAL/SIDE=95-207-6-L	MED	36.5 36.7 36.7 36.7 36.7 36.7	36.6 36.6 36.7 36.7 36.8	36.8 36.8 36.8 36.8	SIDE=93-1-4-L BP MED MEAN TEMP	35.9 36.7 36.7 36.6 36.7 36.7 36.7 36.7 36.7
/SIDE=(	BP	738 738 74 75 76 76 76 76 76 76 76 76 76 76 76 76 76	740 740 740 740 740 740 740 740 740 740	36 34 34 34 35 36 36 37	/SIDE= BP MEAN	23 23 23 23 24 23 26 28 28 24 28 28 24 28 28 28 28 28 28 28 28 28 28 28 28 28
ANIMAL	ART Medph	7.7.3		4.7.7.4.7.7.4.7.7.7.7.7.7.7.7.7.7.7.7.7	ANIMAL ART MEDPH	22252222222222222222222222222222222222
26/90	HUMI	35.5 35.5 35.2 35.2 35.2	37.8 38.9 38.0 40.0 40.2	38.4 38.9 40.0 41.9 40.9	HUMI DITY	39.0 37.8 37.8 37.6 37.6 37.6 37.7 38.1 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36
DATE=04/06/95	AIR	37.3 37.4 37.4 37.4 37.4	37.4 37.4 37.4 37.5 37.5	37.5 37.5 37.5 37.2 37.2	DAIE=04/12/95 AIR HUMI TEMP DITY	37.0 37.3 37.3 37.7 37.7 37.7 37.7 37.7
	REL- TIME	0.50	2.8 8 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6.50 6.50 7.00 7.50 8.00	=2530 REL- TIME	0.73 0.73 0.73 0.00 0.52 0.00 0.53 0.52 0.53 0.52 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.53
FLAPNO=2534	ACTL TIME	10:15 10:30 10:45 11:15 11:45 12:15	13:15 14:15 14:45 15:15 16:15	16:45 17:45 17:45 18:45	- FLAPNU=2556 ACTL RELTIME TIME	9:30 9:45 10:02 10:02 11:30 12:30 14:30 16:00 16:00 16:00
f 1 1 1 1	TARG	10:15 10:30 10:45 11:15 12:15	13:14 14:15 15:14 15:15	16:45 17:15 17:45 18:15 18:45	TARG	9:30 10:00 11:30 11:30 12:30 12:30 13:30 14:30 15:30 15:30 16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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1 6 5 6 1 1	OLUC CUM	3.96 4.20 4.47 4.77	 	UN OUT	0.0 0.12 0.0 0.12 0.13 0.13 0.13 0.13 0.13 0.13 0.13 0.13	OLUG MUD	0.01 0.06 0.12 0.20
NCSU=Yes -	GLUC	0.48 0.47 0.55 0.59	NCSU=No	GLUC UTIL	0.24 0.67 0.67 0.67 0.69 0.74 0.30 0.30 0.24 0.25	NCSU=No - GLUC UTIL	0.12 0.20 0.23 0.32
MEDVOL=457	ADJ RESIS	36.5 36.7 32.9 32.6	HD MEDVOL=482	ADJ RESIS	28.6 28.6 28.6 28.6 28.6 29.6 29.6 29.6 29.6 29.6 29.6 29.6 29	MEDVOL=435 ADJ ADJ :LOW RESIS	41.8 43.1 48.0 51.7
MEDVO	ADJ FLOW	0.88 0.87 0.94 0.95	D MED	ADJ FLOW	0.93 0.93 0.93 0.93 0.93 0.93 0.93	MEDVC ADJ FLOW	0.91 0.86 0.85 0.85
GROUP=15 mg HD	VRE- SIST	32.2 32.3 29.0 28.7	GROUP=15 mg H	VRE- SIST	24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0	GROUP=EtOH	35.0 36.1 40.2 43.3
GROUP=	LACT	0.98 0.95 0.91 0.88		LACT	- N W Q V 4 4 4 4 0 0 - 4 4 4 2 8 8 8 8		1.63 1.16 1.06 0.95
:=10:29	DEXT	0.897 0.888 0.869 0.851	DOSETIME=11:01	DEXT	0.990 0.887 0.763 0.775 0.771 0.830 0.983 1.030 1.030 1.030	DOSETIME=10:43 CT DEXT LAC EV ROSV DEX	1.070 1.040 1.030 0.974
DOSETIME=10:29	LACT	0.271 0.265 0.272 0.281		LACT	0.291 0.364 0.448 0.448 0.463 0.481 0.273 0.257 0.202 0.171 0.173	.29 DOS LACT ATEV	0.121 0.139 0.150 0.181
FLAPWT=32.79 continued)	DEXT ROSA	1.160 1.150 1.150 1.150	FLAPWT=35.45	DEXT	1.150 1.150 1.150 1.150 1.150 1.160 1.170 1.160	FLAPWT=31.29 DEXT LACROSA ATI	1.130 1.140 1.150
3	LACT	0.013 0.015 0.016 0.017		LACT		PHASE=2 F I LACT I ATEA	0.023 0.023 0.023 0.023
PHASE=2	MEAN	1.00 0.99 1.07	-R PHASE=2	MEAN			1.03
DE=95-1-4-L	MED	36.4 36.4 36.3 36.4	DE=95-205-7-R	MED	3555 3555 3555 3555 3555 3555 3555 355	'SIDE=95-205-7-L IP MED ME/ :AN TEMP FL(	35.5 36.1 35.9 35.9
<b>—</b>	BP MEAN	332 15	/SIDE=9	BP MEAN	M M M M M M M M M M A A A A A A A A A A	<b>—</b> —	38 41 44
ANIMAL/S	ART Medph	7.4 7.4 7.4 7.4	ANIMAL/SI	ART Medph	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ANIMAL ART	7.4
	HUMI DITY	35.4 35.7 35.9 36.4	13/95	HUMI	40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0	DATE=04/13/95 AIR HUMI TEMP DITY	39.7 38.5 38.4 38.2
DATE=04/12/95	AIR TEMP	37.7 37.6 37.5 37.5	DATE=04/13/95	AIR TEMP			35.9 36.6 36.6 36.7
	REL- TIME	6.52 7.02 7.52 8.02		REL- TIME	-1.02 -0.77 -0.50 -0.27 -0.27 -0.08 -0.98 -1.48	FLAPNO=2538 TL REL- ME TIME	-0.97 -0.72 -0.47 -0.22
· FLAPNO=2536	ACTL TIME	17:00 17:30 18:30	- FLAPNO=2537	ACTL TIME	10:00 10:15 10:15 11:01 11:30 12:30 14:30 15:30 17:30 17:30 17:30 18:30	FLAF ACTL TIME	9:45 10:00 10:15 10:30
	TARG	17:00 17:30 18:00 18:30		TARG	10:00 10:15 10:30 11:00 12:00 12:00 14:30 15:00 17:00 17:00 18:00 18:00	TARG	9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	GLUC	0.26 0.52 0.52 0.52 1.33 1.52 1.52 1.65 1.99	2.19	CUM 6 CUM 0.01 0.03 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.4
NCSU=No -	GLUC UTIL	0.30 0.37 0.37 0.33 0.33 0.20 0.20	0.22 0.19 NCSU=Yes	0.64 0.73 0.73 0.73 0.73 0.73 0.74 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75
MEDVOL=435	ADJ RESIS	488.9 48.0		ADJ 41.4 41.2 41.2 41.2 41.2 42.9 42.9 42.9 42.9 42.9 42.9 42.9 42
MEDVO	ADJ FLOW	0.88 0.88 0.88 0.86 0.80 0.80 0.80 0.78	0.80 36.0 0.81 35.7 MEDVOL=410	ADJ 10.82 0.382 0.383 0.73 0.73 0.73 0.73 0.73 0.73
GROUP≂EtOH	VRE- SIST	21.0 27.0 37.0 38.7 38.7 38.7 39.7 30.7 30.7	13 30.2 55 29.9 GROUP=EtOH	VRE- SIST 32.7 32.9 33.0 34.0 34.6 34.6 34.2 33.7 33.7 34.2 35.6 40.0 40.0 39.8 39.8
	LACT	1.28 1.28 1.28 1.28 1.20 1.20 1.20 1.20 1.20		LACT DEXT 0.90 0.90 0.90 0.95 0.95 0.95 0.95 0.95
DOSETIME=10:43	DEXT ROSV	0.991 1.020 1.060 0.968 0.983 0.993 1.010 1.020 1.080 1.060	51 1.060 1. 49 1.070 1. DOSETIME=10:30	DEXT ROSV 0.854 0.812 0.719 0.667 0.669 0.662 0.682 0.682 0.682 0.682 0.682 0.682 0.682 0.682 0.682 0.718 0.916 0.916
	LACT	0.201 0.198 0.157 0.251 0.227 0.233 0.206 0.207 0.191 0.113		1ACT 0.259 0.360 0.428 0.463 0.463 0.494 0.500 0.494 0.511 0.494 0.511 0.511 0.297 0.297
FLAPWT=31.29 nued)	DEXT	1.140 1.150 1.150 1.150 1.170 1.170 1.170 1.170 1.170 1.170	1.180 0. 1.170 0. FLAPWT=25.83	ROSA 1.120 1.120 1.150 1.150 1.140 1.140 1.150 1.150 1.150 1.150 1.150
PHASE=2 FLAPW (continued)	LACT	0.023 0.024 0.023 0.022 0.021 0.021 0.019 0.018 0.018	% 0.016 % 0.014 PHASE=2 FI	ATEA 0.020 0.019 0.019 0.019 0.015 0.015 0.015 0.015 0.016
	MEAN	1.05 1.06 1.06 1.06 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	. 0, 0,	MEAN 1.04 1.04 1.06 1.09 1.00 1.00 1.00 1.00 1.00 1.00 1.00
NIMAL/SIDE=95-205-7-L	MED TEMP	35.9 35.9 36.2 36.2 36.2 36.2 36.2 36.2 36.2	7.4 29 36.3 0. 7.4 29 36.3 0. ANIMAL/SIDE=95-208-5-L	TED 35.02 35.03 36.32 35.03 36.32 35.33 36
AL/SID	BP MEAN	20 20 20 20 20 20 20 20 20 20 20 20 20 2	29 29 AL/SIDE	# B B B B B B B B B B B B B B B B B B B
•	ART MEDPH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.4 7.4 ANIM	ART MEDPH MEDPH 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3
DATE=04/13/95	HUMI	37.23 38.83 37.23	36.9 36.6 37.0 35.9 DATE=04/19/95	HUMI DITT 39.0 37.1 36.2 36.5
DATE=(	AIR TEMP	7.7.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	36.9 37.0 DATE=0	AIR 36.6 36.8 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2
FLAPNO=2538	REL- Time	0.00 0.53 1.53 2.03 3.53 3.53 4.53 6.53 6.53 6.53	:15 7.53 :45 8.03 FLAPNO=2540	7.50 7.50 7.50 7.50 7.50 7.50 7.50 7.50
FLAF	ACTL TIME	11:15 12:15 13:15 14:15 14:15 15:15 15:15 17:15 17:15 17:15 17:15	18:45 18:45	ACTL TIME 9:30 9:45 10:00 10:10 11:00 11:30 12:3
	TARG	11:15 11:15 12:15 12:15 13:15 14:45 14:45 16:15 16:45	18:15	1ARG 9:30 9:30 10:15 10:15 10:15 11:30 12:30 12:30 12:30 12:30 12:30 12:30 12:30 12:30 12:30 17:30

## TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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	SLUC MUD	6.94		GLUC	0.01	0.21	0.38	0.65 0.65	0.77	0.89	1.09	1.17	3.5	1.39	1.46	¥	9.09	1.61	1.65		CUM	0.01 0.24 0.38 0.53 0.53
NCSU=Yes	GLUC UT1L	0.48 0.48	NCSU=Yes	GLUC	0.28	0.41	0.32	0.33	0.24	0.25	0.22	0.15	0.0 5.5	0.17	0.15	0.1. 0.1.	0.00	0.02	90.0	NCSU=Yes	GLUC UTIL	0.36 0.52 0.57 0.64
	ADJ RESIS	49.3	MEDVOL=408	ADJ RESIS	54.7	42.6	40.7	40.5 39.0	38.4	36.2 34.7	33.7	34.2	36.9	36.0	36.7	38.2	36.7	36.0	57.3	MEDVOL=505	ADJ RESIS	60.6 53.4 54.5 50.4 49.3
MEDVOL=410	ADJ FLOW F	0.77		ADJ FLOW F	0.79	0.77	9.79	0.7 0.7	5.7	0.77	0.80	8.9	3.5	0.78	0.79	9.0	0.76	0.78	c0		ADJ FLOW	0.97 0.97 0.97 0.97 0.97
GROUP=EtOH	VRE- SIST	39.0 38.1	GROUP=15 mg HD	VRE- SIST	43.0 37.1	33.5	32.0	51.6 30.7	30.2	28.4	26.5	26.9	29.0	28.3	28.9	50.1	28.9	28.3	5.63	GROUP=15 mg HD	VRE- SIST	59.0 52.0 53.0 51.0 49.0
	LACT	1.02	GROUP:	LACT	0.80	0.95	1.05		1.03	1.12	0.78	0.97	7.0	29.0	0.84	1.87	<u>.</u> .	2.70	1.13		LACT	0.77 0.91 1.03 1.03 0.92
DOSETIME=10:30	DEXT ROSV	0.920	DOSETIME=10:42	DEXT	0.984	0.920	0.949	1.020	0.998	0.996 1.010	1.020	1.030	1.040	1.030	1.030	040	1,150	1.050	1.020	DOSETIME=10:29	DEXT	0.973 0.954 0.897 0.889 0.869 0.876
	LACT	0.235		LACT	0.126	0.209	0.189	0.201	0.150	0.144	0.120	0.111	0.107	0.103	0.107	0.10	0.107	0.087	0.095		LACT	0.139 0.178 0.246 0.265 0.267
FLAPWT=25.83 tinued)	DEXT	1.130	FLAPWT=27.25	DEXT	1.110	1.110	.10	1.10	1.110	1.110	1.120	1.100	1.09	1.110	1.100	1.10	1.010	1.060	1.050	FLAPWT=24.47	DEXT	1.120 1.120 1.110 1.130
PHASE=2 FLAPWT (continued)	LACT	0.021		LACT	0.025	0.029	0.030	0.035	0.035	0.036	0.042	0.043	0.044	0.049	0.048	0.048	0.056	0.060	0.059		LACT	0.026 0.027 0.027 0.027 0.028 0.028
	MEAN	0.98	R PHASE=2	MEAN	1.00	0.0	0.97	0.95 2.95	0.96	6.0	1.02	<u>.</u> .	. 6.	0.99	1.01	76.0	0.90	0.99	96.0	L PHASE=2	MEAN FLOW	888888
ANIMAL/SIDE=95-208-5-L	MED	36.4 36.6	E=95-212-7-R	MED	36.7	35.7	36.6	36.8 8.8	36.7	36.7	36,6	36.5	36.5 36.5	36.6	36.4	36.4	36.4	36.6	36.6	ANIMAL/SIDE=95-212-7-L	MED	35.8 35.8 35.8 35.7 35.9
L/SIDE=	BP MEAN	38 37	SIDE=95	BP MEAN	36	£ 5	3 15 1	S &	8	54 54 54	22	27	88	<b>58</b>	8	8 8	% 6	8	87	'SIDE=9	BP MEAN	52 53 54 64 74 75 75 75 76 76 76 76 76 76 76 76 76 76 76 76 76
ANIWA	ART MEDPH	7.3	ANIMAL/SID	ART MEDPH	7.3	7.3	7.4		7.3	7.3	7.4	7.3	 	7.3	7.3	5.7	* K	7.4	5.	AN I MAL/	ART Medph	5.7.7.7.7.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.
/19/95	HUMI DITY	35.5 35.3		HUMI DITY	37.5 35.5	37.9	36.7	36.5 36.5	36.6	36.2 36.6	39.5	38.0	39.5	39.2	40.9	7.17	41.3	40.7	8.04		HUMI	41.7 41.1 40.0 40.2 40.2 39.7
DATE=04/19/95	AIR	37.3 37.3	DATE=04/20/95	AIR	37.2	36.8	37.6	37.8	37.7	37.7	37.6	37.5	37.5	37.6	37.5	57.5	37.5	37.5	37.6	DATE=04/20/95	AIR TEMP	36.0 36.7 36.8 36.8 36.8
FLAPNO=2540	REL- TIME	8.00		REL- TIME	-0.95	-0.45	18:	1.05	1.55	2.55	3.05	3.55	4.55	5.05	5.55	6.03 50.03	7.05	7.55	8.05		REL- TIME	-0.98 -0.73 -0.23 -0.23 0.52
FLAPN	ACTL TIME	18:00 18:30	FLAPN0=2541	ACTL TIME	9:45	10:15	10:42	11:15	12:15	12:45	13:45	14:15	14:45	15:45	16:15	16:45	17:45	18:15	18:45	FLAPNO=2542	ACTL	9:30 9:45 10:00 10:15 10:29 11:00
	TARG	18:00 18:30		TARG	9:45	10:15	10:45	11:15	12:15	12:45	13:45	14:15	14:45	15:45	16:15	16:45	17:45	18:15	18:45		TARG	9:30 9:45 10:00 10:15 10:30 11:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS
USING SHADY SIDE PIGS AND SIGMA BSA

1 1 2 1 1	SLUC CUM	1.12	<i>c</i> - 8 6	2.31	2.70	3.06	3.42	3.76
NCSU=Yes	GLUC	0.56	0.47	0.43	0.39	0.35	0.36	0.34
MEDVOL=505	ADJ RESIS	46.2	51.7 5.4.7 5.4.7	51.5	51.4	44.2	42.1 40.1	38.0 37.0
	ADJ FLOW	0.97	0.97	0.97	0.97	0.97	0.97	0.97 0.97
=15 mg HD	VRE- SIST	45.0	50.0	20.02	20.02	43.0	41.0	37.0 36.0
GROUP=15	LACT	1.08	1.25		0.97	1.00	0.93	0.9%
DOSETIME=10:29	DEXT	0.890	0.927	0.955	0.971	0.987	0.983	0.973
	LACT	0.279	0.267	0.223	0.183	0.168	0.165	0.152
: FLAPWT=24.47 continued)	DEXT	1.120	1.120	1.130	1.130	1.130	1.130	1.110
=2 FLAP (contin	LACT	0.030	0.032	0.031	0.028	0.025	0.028	0.023
PHASE=2	MEAN	9.6	388	888	888	88	88	9.0
AL/SIDE=95-212-7-L	MED	35.8	36.0	36.0	35.9	36.0	36.0 35.9	36.0 36.0
S10E=99	BP MEAN	45	3 22 5	3 22 2	2 2 2	<b>13 13</b>	41 39	36
AN I MAL /	ART MEDPH	7.4	4.2.	. 4.	4.4	7.7	7.4	7.4
	HUMI	39.6	2.04	40.8	41.6	42.4	44.4	43.9
DATE=04/20/95	AIR	36.9	36.9	37.0	36.9	36.9	36.9 37.0	37.0 37.0
	REL- TIME	1.02	2.52	3.52	4.52	5.52	6.52	7.528.02
FLAPNO=2542	ACTL TIME	11:30	13:00	14:00	15:00	16:00	17:00	18:30 18:30
	TARG	11:30	12:30	14:00	15:00	16:00	17:00	18:00 18:30

NCSU=Yes MEDVOL=457 ADJ RESIS ADJ FLOW 오 DOSETIME=10:41 GROUP=15 mg 75.0 331.0 27.0 27.0 27.0 27.0 27.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 LACT 1.060 0.830 0.825 0.725 0.772 0.772 0.773 0.773 0.773 0.773 0.774 0.770 DEXT ROSV 0.076 0.299 0.343 0.372 0.393 0.393 0.406 0.406 0.369 0.341 0.311 0.311 0.243 LACT FLAPNO=2543 DATE=04/26/95 ANIMAL/SIDE=95-214-11-R PHASE=2 FLAPWT=23.81 1.160 1.170 1.170 1.170 1.150 1.150 1.150 1.150 1.150 1.150 1.150 1.150 DEXT 0.021 0.022 0.022 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.027 0.024 0.027 LACT MEAN 35.22 35.55 35.55 35.55 35.75 BP MEAN ART MEDPH HUMI DITY 7.00 2.00 -0.93 -0.68 -0.57 -0.22 -0.22 -0.23 -0.57 9:45 10:00 10:00 10:01 11:15 11:15 12:45 14:15 15:15 17:15 18:15 18:15 18:15 18:15 9:45 10:00 10:30 11:45 11:45 12:45 13:45 14:45 14:45 15:45 16:15 17:45 18:45 18:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SLUC GLUC	0.01	0.16	0.32	0.54	0.70	1.24	1.71	2.11	2.56	2.97	3.41	3.75	3.96	4.17	4.38	4.58	4.78	5.01	2.50	5.39	2.60
NCSU=Yes	GLUC UTIL	0.46	0.58	0.64	0.89	0.88	96.0	0.92	0.82	0.88	0.83	0.88	0.62	0.49	0.41	0.42	0.41	0.40	97.0	0.39	0.37	0.45
MEDVOL=450	ADJ RESIS	44.1	51.3	66.1	62.8	69.2	2.79	71.0	84.9	109.1	109.7	100.6	129.6	128.3	123.3	116.6	109.8	102.5	100.5	86.5	86.2	84.3
E MEC	ADJ FLOW	0.91	0.94	98.0	0.88	0.78	0.80	0.79	0.79	0.81	0.80	0.91	0.84	0.81	0.82	0.82	0.82	98.0	0.85	0.90	0.86	0.85
GROUP=15 mg	VRE- SIST	38.3	4.4	57.3	54.5	0.09	58.7	61.5	73.6	9.76	95.1	87.2	112.4	111.2	106.9	101.1	95.2	88.9	87.2	75.0	74.7	73.1
_	LACT	0.88	0.82	0.93	0.99	1.00	1.00	9.	1.02	26.0	0.97	9.	1.10	0.97	1.1	1.04	1.03	1.08	0.87	1.08	1.12	0.98
DOSETIME=10:26	DEXT ROSV	0.945	0.952	0.936	0.834	0.798	0.776	0.796	0.826	0.809	0.839	0.870	0.926	296.0	1.000	0.994	1.000	1.010	0.997	1.010	1.000	0.971
	LACT	0.163	0.177	0.230	0.323	0.364	0.388	0.379	0.345	0.347	0.329	0.319	0.273	0.202	0.195	0.191	0.181	0.176	0.169	0.167	0.169	0.165
FLAPWT=20.92	DEXT	1,100	1.140	1.160	1.140	1.140	1.140	1.150	1.140	1.140	1.150	1.160	1.150	1.150	1.150	1.150	1.150	1.150	1.160	1.140	1.130	1.120
	LACT	0.026	0.022	0.022	0.021	0.022	0.023	0.025	0.025	0.026	0.026	0.028	0.027	0.028	0.028	0.029	0.027	0.027	0.027	0.026	0.024	0.019
L PHASE=2	MEAN	50.	1.08	9.	1.01	0.0	0.92	0.91	0.91	0.93	0.93	1.06	0.97	0.94	0.95	0.94	0.95	0.99	0.98	1.04	0.99	0.99
'SIDE=95-214-11-L	MED	35.8	36.1	36.3	36.3	36.3	36.2	36.3	36.3	36.4	36.5	36.6	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.6	36.7	36.7
S10E=9!	BP	07	87	57	55	24	24	26	29	88	88	35	109	104	101	5	8	88	8	28	7,	22
ANIMAL/	ART Medph	7 2	7.3	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	HUMI	۶ ۲	36.2	36.9	35.4	35.1	35.7	35.0	33.6	32.5	33.6	32.7	35.7	35.2	35.8	35.6	34.6	35.1	33.9	34.8	32.4	33.7
DATE=04/26/95	AIR	7 %	37.1	37.2	37.3	37.3	37.3	37.5	37.5	37.6	37.6	37.7	37.6	37.9	37.5	37.5	37.5	37.4	37.5	37.6	37.7	37.7
	REL- TIME	20	-0.68	-0.43	-0.18	000	0.57	1.07	1.57	2.07	2.57	3.07	3.57	4.07	4.57	5.07	5.57	6.07	6.57	70.7	7.57	8.07
FLAPNO=2544	ACTL TIME	0.30	57:0	10:00	10:15	10:26	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	02.0	9.45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

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	CUM	0.01	0.33	0.35	1.25	1.78	2.28	<b>2.79</b>	3.23	3.64	4.02	4.38	4.67	2.00	5.29
∙csU=Yes	GLUC UTIL	0.39	2.73	0.89	0.99	1.06	1.02	1.00	0.89	0.82	0.76	0.70	0.59	0.65	0.58
-=457	ADJ RESIS	42.1	39.9	32.0	38.9	39.8	43.9	44.8	52.3	55.9	56.5	58.2	60.1	59.5	58.7
MEDVOL=457	ADJ FLOW	0.95	98	2.8	0.92	0.93	0.89	0.92	0.0	0.88	0.0	0.91	0.0	0.91	0.90
GROUP=E tOH	VRE- SIST	37.0 35.9	35.1	28.2	34.3	35.1	38.6	39.4	46.1	49.5	49.8	51.2	52.9	52.4	51.7
	LACT	1.69	1.17	2 %	0.97	0.9	1.01	1.1	1.09	0.97	0.99	1.03	1.17	0.97	1.03
DOSETIME=10:45	DEXT ROSV	0.966	0.854	0.769	0.723	0.698	0.677	0.705	744	0.753	0.790	0.827	0.861	0.868	0.875
	LACT	0.292	0.351	0.585	0.429	0.463	0.474	0.498	0.452	0.385	0.361	0.347	0.336	0.304	0.291
FLAPWT=25.84	DEXT	1.120	1.130	1.130	1.130	1.130	1.110	1.120	1.120	1.110	1.110	1.120	1.110	1.140	1.120
PHASE=2 FL.	LACT	0.031	0.028	0.030	0.033	0.037	0.038	0.039	0.041	0.038	0.044	0.044	0.044	0.041	0.039
	MEAN	1.08	1.1	1.05	1.05	9.1	1.01	1.04	1.02	9.	1.03	1.04	1.02	1.03	1.03
SIDE=95-209-4-R	MED	35.0 36.1	36.4	36.6 36.6	36.6	36.7	36.7	36.5	36.9	36.8	36.7	36.7	36.7	36.7	36.7
	BP MEAN	39	33	% % %	38	37	36	41	24	67	5	53	24	24	23
ANIMAL/	ART Medph	7.4	7.4	7.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
/27/95	HUMI DITY	38.9	36.2	35.6 36.0	35.9	36.5	35.9	36.9	35.4	38.2	37.5	37.6	36.3	36.0	36.0
DATE=04/27/95	AIR TEMP	36.2	37.7	37.8	37.9	38.0	38.0	37.7	38.1	38.2	38.1	38.0	37.9	38.0	37.9
FLAPNO=2545	REL- TIME	-1.00	-0.50	9.5	0.50	9.0	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50
- FLAPN	ACTL TIME	9:45	10:15	10:30 10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15
	TARG	9:45	10:15	10:30	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15

## TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

			•						;		
	CUM	5.56 5.82 6.06 6.28 6.52		CUM	0.01 0.18 0.36 0.59	2.13 2.72 3.20	3.60 4.41 4.75 5.05	5.36 5.36 5.38 6.18 6.46 7.09	1	SLUC CUM	0.01 0.24 0.44
NCSU=Yes	GLUC	0.54 0.52 0.48 0.44	NCSU=Yes	GLUC	0.48 0.69 0.72 1.04	1.25 1.18 0.96	0.80 0.93 0.67 0.67	0.59 0.51 0.56 0.56 0.56 0.56	NCSU=Yes	GLUC UT1L	0.80 0.90 0.80
	ADJ RESIS	61.2 46.1 56.2 55.9 52.4		ADJ RESIS	77.0 64.2 63.8 62.5	59.4 61.3 73.9	85.6 65.3 88.7 89.4	87.6 77.8 82.0 80.1 81.9 72.0	MEDVOL=444	ADJ RESIS	46.8 35.6 34.0
MEDVOL=457	ADJ FLOW	0.85 0.89 0.87 0.88 0.92	MEDVOL=337	ADJ FLOW	0.74 0.78 0.62 0.64	0.08 0.72 0.64	0.58 0.63 0.63	0.63 0.63 0.64 0.69 0.69		ADJ FLOW	0.98 0.98 0.97
GROUP=E tOH	VRE- SIST	53.9 40.6 49.5 46.2	GROUP=EtoH	VRE- SIST	50.0 41.7 41.4 40.6	38.6 39.8 48.0	55.6 42.4 57.6 58.0	56.9 53.3 52.0 53.2 46.7	GROUP=No Topical	VRE- SIST	40.0 30.4 29.1
	LACT	1.01 1.05 1.08 1.18		LACT	1.33	1.02	1.02	1.02 1.02 1.06 0.95 0.98	GROUP=	LACT	0.24 0.55 0.76
DOSETIME=10:45	DEXT	0.878 0.888 0.891 0.900 0.881	DOSETIME=10:15	DEXT	0.960 0.895 0.820 0.761 0.688	0.698 0.662 0.701 0.702	0.742 0.803 0.819 0.824	0.865 0.865 0.875 0.849 0.854 0.854	E=10:45	DEXT ROSV	0.876 0.838 0.882
	LACT	0.283 0.272 0.265 0.265 0.258		LACT	0.341 0.351 0.405 0.447	0.481 0.506 0.461 0.477	0.417 0.424 0.348 0.340	0.301 0.323 0.323 0.310 0.295 0.291	DOSETIME=10:45	LACT	0.089 0.204 0.245
FLAPWT=25.84 ntinued)	DEXT ROSA	1.120 1.110 1.090 1.080	FLAPWT=25.6	DEXT ROSA	1.140	1.130 1.140 1.120 1.120	1.120	1.100	FLAPWT=25.4	DEXT	1.170 1.170 1.180
PHASE=2 FLAPWT (continued)	LACT	0.039 0.040 0.040 0.039	PHASE=2 FI	LACT	0.032 0.024 0.025 0.026	0.030 0.032 0.033 0.037	0.041 0.042 0.041	0.045 0.045 0.045 0.045 0.047		LACT	0.019 0.021 0.020
	MEAN	0.97 1.01 0.99 1.00		MEAN FLOW	1.14 1.20 0.96 0.99	1.30 1.12 1.21 0.98	0.99	0.99 0.99 0.98 1.07	R PHASE=1	MEAN	1.15
IDE=95-209-4-R	MED TEMP	36.7 36.7 36.7 36.7 36.6	SIDE=95-209-4-L	MED	33.1 35.1 35.1 35.3	35.7 35.7 35.8	35.9 36.0 36.0	386.5 36.6 36.4 36.4 4.4 5.4	DE=95-223-9-R	AED FFP	36.3 36.1 36.3
/SIDE=(	BP	52 49 49 48		BP MEAN	50 40 40 40	43 44 43	22 23 23	25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	SIDE=95	BP MEAN	333 46
ANIMAL/S	ART Medph	7.4 7.4 7.3 7.4 7.4	ANIMAL,	ART Medph	2.7.7.3	7.4	4.7.4.4.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	* 4 4 4 4 4 4 4	ANIMAL/SIC	ART Medph	7.4 7.4 7.3
727/95	HUMI DITY	36.2 35.2 35.2 35.3	DATE=04/27/95	HUMI	44.2 42.2 42.2 42.3	40.6 41.1 42.0 42.6	42.6 42.0 43.2 42.8	43.1 41.0 41.1 40.3 40.6 39.5		HUMI	38.5 37.2 36.7
DATE=04/27/95	AIR TEMP	38.0 38.0 38.2 37.9	DATE=0	AIR	33.7 35.2 35.7 35.9 36.0	36.2 36.4 36.4 36.5	36.5 36.5 36.5	36.6 36.6 36.6 36.7 36.7 36.7	DATE=05/03/95	A1R TEMP	37.5 37.5 37.5
FLAPNO=2545	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPNO=2546	REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00	0.50 1.50 2.00	3.50	5.50 6.00 7.00 7.50 8.00		REL- TIME	-1.00 -0.75 -0.50
- FLAPN	ACTL TIME	16:45 17:15 17:45 18:15 18:45	FLAP	ACTL TIME	9:15 9:30 9:45 10:00	10:45 11:15 11:45 12:15	12:45 13:15 13:45 14:15	14:45 15:45 16:15 17:15 17:15 18:15	FLAPN0=2547	ACTL TIME	9:45 10:00 10:15
	TARG	16:45 17:15 17:45 18:15 18:45		TARG	9:15 9:30 9:45 10:00	10:45 11:15 11:45 12:15	12:45 13:15 14:15	74:65 15:15 16:15 16:15 17:15 17:15 18:15	1	TARG	9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.67	. r. s	2.50 2.64	2.86	3.28	3.39	3.49 7.8	3.63	3.71	3.75	3.80	3.80	3.80
NCSU=Yes	GLUC	0.90	0.87	0.92 0.87	0.44	0.38	0.21	0.21	0.10	0.16	0.10	0.10	0.00	0.00
MEDVOL=444	ADJ RESIS	33.4	32.0	29.5 28.3	27.7	27.1	29.1	26.0 28.0	28.8	26.7	29.5	30.3	33.1	33.6
	ADJ FLOW	0.93	0.97	0.95	9.0	0.92	98.0	9.0	0.87	0.94	0.88	0.89	0.85	0.89
GROUP=No Topical	VRE- SIST	28.6	27.4	25.2 24.2	23.7	23.1	54.9	22.2	24.6	22.8	22.5	26.0	28.3	28.7
GROUP=	LACT	0.83	1.02	1.03	1.08	1.5	1.68	1.35	1.3	0.95	1.25	0.0		
DOSETIME=10:45	DEXT	0.829	0.812	0.830	0.985	1.010	1.060	1.070	1.120	1.090	1.100	1.110	1.150	1.140
DOSETIM	LACT	0.306	0.374	0.364	0.210	0.186	0.169	0.124	0.087	0.075	0.067	0.054	0.025	0.021
WT=25.4 ued)	DEXT ROSA	1.170	1.16	1.16 0.15	1.160	1.160	1.150	1.150	1.160	1.150	1.140	1.150	1.150	1.140
PHASE=1 FLAPWT=25.4 (continued)	LACT	0.022	0.021	0.022	0.021	0.020	0.018	0.016	0.018	0.018	0.017	0.018	0.019	0.019
	MEAN	1.08	.0.2	1.1	9:	1.08	1.01	1.13	. 6	1.10	1.03	1.04	0.99	1.05
MAL/SIDE=95-223-9-R	MED	36.6	36.6	36.6 36.8	36.8	36.8	36.8	36.9	36.8	36.7	36.7	36.7	36.6	36.7
S1DE=9	BP MEAN	31	88	28 24	22 1	0 12	52	اد اد	3 13	ĸ	92	27	28	30
AN I MAL /	ART MEDPH	7.4	4.7	4.7	7.4	4.4.	7.4	7.4	7.7	7.4	7.4	7.4	7.3	7.3
3/95	HUMI DITY	37.3	35.0	35.5	33.8	3, 4. 0. 4.	32.2	32.0	32.2	31.7	33.1	32.1	33.6	33.7
DATE=05/03/95	AIR	37.6	37.8	37.8 37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9
	REL- TIME	0.00		2.90	2.50	3.50	7.00	4.50	5.50	9.00	6.50	7.00	7.50	8.00
FLAPNO=2547	ACTL TIME	10:31	11:45	12:15	13:15	15:45	14:45	15:15	16:15	16:45	17:15	17:45	18:15	18:45
	TARG	10:30	11:15	12:15	13:15	15:45	14:45	15:15	16:15	16:45	17:15	17:45	18:15	18:45

	OU SUL	0.01 0.24 0.47 0.73	2.10 2.10 2.47	2.89 3.36 4.24 5.07 5.43	5.72 5.94
NCSU=Yes -	GLUC UTIL			0.84 0.94 0.91 0.85 0.85 0.80	
MEDVOL=399	ADJ RESIS	41.1 35.2 34.1 30.9 44.4	39.9 47.6 54.1	52.0 55.0 54.6 64.0 59.7	58.0 60.1
MEDVO	ADJ FLOW	0.85 0.85 0.91 0.63	0.68 0.68	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.78
GROUP=E tOH	VRE- SIST	31.6 27.0 26.2 23.7 34.1	30.7 36.6 41.6	40.0 42.3 42.0 49.2 47.7 45.9	44.6 46.2
	LACT	0.42 0.65 0.81 0.87	2.1.03	1.03 1.06 1.02 0.99 0.99	1.03
DOSETIME=10:30	DEXT ROSV	0.700 0.771 0.777 0.756	0.73 0.73 0.73 0.73	0.758 0.762 0.747 0.769 0.800 0.832	0.894
	LACT	0.192 0.259 0.315 0.360 0.389	0.398 0.407 0.410	0.423 0.439 0.424 0.412 0.402 0.371	0.266
FLAPWT=26.5	DEXT	1.140	1.160 1.140 1.150	1.150 1.160 1.160 1.160 1.160	1.150
PHASE=2	LACT	0.018 0.020 0.020 0.020	0.018 0.018 0.019	0.018 0.017 0.015 0.015 0.013	0.011
	MEAN	1.11	0.95 0.88 0.88	0.95 1.04 0.96 0.97 0.98	1.00
./SIDE=95-223-9-L	MED	35.2 35.2 35.3 35.3 4	35.3 35.4 35.4	22 22 22 22 22 22 22 22 22 22 22 22 22	35.6 35.6
	BP MEAN	3888383	3225	£2642548	42 46
5 ANIMA	ART Medph	7.7.7.7.7.7.3.3	4.4.4.4.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.4
DATE=05/03/95	HUMI	44.5 44.3 43.9 44.1	43.6 43.6 43.9 53.5	42.8 41.5 40.4 40.4 40.4	40.2 39.7
DATE=(	AIR TEMP	35.4 35.5 35.5 35.5	35.7 35.7 35.7	35.7 35.8 35.9 35.9 35.9	35.9 35.9
FLAPN0=2548	REL- TIME		2.50	2.50 3.00 4.00 6.50 5.50	6.50
FLAF	ACTL TIME	9:30 9:45 10:00 10:15	11:30 12:00 12:30	13:00 14:30 14:30 15:00 16:30	16:30 17:00
	TARG	9:30 9:45 10:00 10:15	11:30 12:00 12:30	13:00 13:30 14:00 14:30 15:00 16:00	16:30 17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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	CUM	6.11 6.30 6.47	· · · · · · · · · · · · · · · · · · ·	CUM	0.01	0.78	1.66	2.77	3.07 3.42	3.80	4.15	4.85	5.03	5.43	5.57	5.62	6.05	i i i i	CUM	0.01 0.17 0.35 0.55
NCSU=Yes	GLUC UT1L	0.36 0.38 0.33	NCSU=Yes	GLUC UTIL	1.42	1.19	2.15	0.92	0.59	0.75	0.73	0.64	0.37	0.33	0.27	0.39	0.25	NCSU=Yes -	GLUC UTIL	1.17 0.74 0.71 0.81
	ADJ RESIS	61.8 60.3 64.4	MEDVOL=468	ADJ RESIS	59.5	33.4	35.2	44.9	65.0 50.8	48.6	45.5	41.7	42.3	45.9	45.9	42.4 45.4	9.24		ADJ RESIS	39.1 37.0 33.2 33.2 35.9
MEDVOL=399	ADJ FLOW	0.76 0.80 0.78		ADJ FLOW	0.99	2.08	. 6.2	0.78	0.78	0.91	2.0	0.98	0.0	0.92	0.92	0.92	0.86	MEDVOL=533	ADJ FLOW	1.41 1.13 1.15 1.06
GROUP=E tOH	VRE- SIST	47.5 46.4 49.5	GROUP=No Topical	VRE- SIST	40.2 53.7	30.1	31.7	40.5 40.5	58.6 45.8	43.8	41.1	37.6	38.2	41.4	41.4	41.0	45.9	GROUP=EtOH	VRE- SIST	40.1 38.0 34.1 34.1 36.9
	LACT	1.06 0.97 0.99	GROUP=1	LACT	0.25	0.87	0.92	1.07	5.5	0.99	1.03	0.95	1.42	1.07	1.25	0.97	1.15		LACT	0.30 0.48 0.71 0.77
DOSETIME=10:30	DEXT	0.991 0.989 0.997	E=10:30	DEXT ROSV	0.699	0.785	0.758	0.760	0.838	0.834	0.868	0.930	1.020	0.994	0.994	0.955	0.917	DOSETIME=10:00	DEXT ROSV	0.850 0.921 0.940 0.899
	LACT	0.180 0.161 0.144	DOSETIME=10:30	LACT	0.143	0.355	0.400	0.442	0.300	0.299	0.282	0.232	0.202	0.151	0.148	0.138	0.132		LACT	0.117 0.142 0.187 0.236 0.304
FLAPWT=26.5 nued)	DEXT	1.150 1.150 1.140	FLAPWT=21.35	DEXT ROSA	1.160	51.1	1.150	1.140	1.080	1.100	1.130	1.140	1.140	1.15	1.090	1.080	1.010	FLAPWT=22.39	DEXT	1.170
PHASE=2 FLAPW (continued)	LACT	0.011 0.005 0.002		LACT	0.029	0.028	0.033	0.037	0.035	0.035	0.033 0.034	0.032	0.032	0.027	0.028	0.027	0.025	PHASE=2 FL	LACT	0.021 0.022 0.024 0.026 0.028
	MEAN	0.99 1.04 1.01	PHASE=1	MEAN	0.75	1.13		0.87	0.87	1.01	1.05	1.09	1.10	1.02	1.02	1.02	96.0		MEAN	1.11
SIDE=95-223-9-L	MED	35.6 35.6 35.6	E=95-221-5-R	MED	36.3	35.4	35.6	35.9	35.7	35.7	35.7 35.8	35.8	35.8 25.8	35.7	35.7	35.7	35.7	SIDE=95-221-5-L	MED	35.2 35.6 35.6 35.6
	BP MEAN	44 48 50	DE=95-	BP MEAN	<b>4</b> 9	3 % 3	* # # i	3 5	£ 24	77	£ 4	14	75	- 24	75	7 £	14		BP	25 33 38 38 38
AN IMAL/	ART Medph	7.4 7.4 7.4	ANIMAL/SIDI	ART MEDPH	7.4	7.4	4.4.	7.Y	7.4	7.4	7.4	7.4	7.4	7.4	7.4	4.7	7.4	ANIMAL/	ART Medph	7.7 7.4 7.4 7.4
DATE=05/03/95	HUMI DITY	39.2 41.1 41.5		HUMI DITY	46.8	ψ.	44.9	44.4 43.3	42.6	42.8	45.6 45.0	45.9	42.5	42.9	43.4	44.5	43.7	104/95	HUMI DITY	38.6 38.4 39.1 38.8 38.8
DATE=0	AIR	35.9 35.9 36.0	DATE=05/04/95	AIR TEMP	35.7	35.8 8.8.8	36.0	36.1	36.2 36.2	36.3	36.3 36.3	36.3	36.3 26.3	36.3	36.4	36.3	36.2	DATE=05/04/95	AIR	35.7 36.4 36.4 36.4
FLAPNO=2548	REL- TIME	7.00 7.50 8.00	549 DAT	REL- TIME	-1.00	-0.50 -0.25	0.50	9.1.	2.50	3.00	3.50 4.00	4.50	8.3	6.9	6.50	7.00	8.00	FLAPNO=2550	REL- TIME	-0.72 -0.50 -0.25 0.00 0.50
FLAPI	ACTL TIME	17:30 18:00 18:30	FLAPN0=2549	ACTL TIME	9:30	10:00 10:15	11:50	12:00	12:30 13:00	13:30	14:00 14:30	15:00	15:30	16:30	17:00	17:30 18:00	18:30	FLAPN	ACTL TIME	9:17 9:30 9:45 10:30
 	TARG	17:30 18:00 18:30		TARG	9:30	10:00 10:15	11:00	11:30	12:30	13:30	14:00	15:00	15:30	16:30	17:00	17:30	18:30		TARG	9:15 9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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	SLUC CUM CUM	1.33 1.69 2.05 2.05 2.05 3.13 3.51 4.16 4.34 4.34	;	OLUC CUM CUM	0.01 0.35 0.35 1.13 1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56
NCSU=Yes	GLUC	0.71 0.72 0.67 0.67 0.42 0.38 0.25 0.29	NCSU=Yes	GLUC UTIL	0.76 0.66 0.65 0.65 0.85 0.85 0.88 0.88 0.78 0.58 0.58 0.58 0.58
	ADJ RESIS	32.6 335.9 335.9 335.9 336.7 336.7 336.7 336.7 336.7	MEDVOL=439	ADJ RESIS	89.0 87.6 87.6 87.6 88.7 78.7 78.0 74.7 74.7 78.0 99.2 89.5 97.7 97.7
MEDVOL=533	ADJ FLOW R	7.1.08 7.1.08 7.1.08 7.1.12 7.1.12 7.1.12	I MED	ADJ Flog	0.82 0.82 0.82 0.83 0.84 0.85 0.85 0.85 0.85 0.85 0.85
GROUP=EtOH +	VRE- SIST	33.5 34.2 36.2 36.3 36.7 36.0 36.0 36.0 36.7	GROUP=No Topical	VRE- SIST	75.3 77.11 77.11 77.11 77.12 66.0 66.0 66.0 75.5 77.7 77.0 77.0 77.0 77.0 77.0 77
	LACT	1.01 1.02 1.03 0.95 0.96 1.08 1.13 1.13 1.00 1.65 1.42 1.27	GROUP=N	LACT	0.49 0.73 0.98 0.98 0.99 0.99 0.99 0.99 0.99 0.99
DOSETIME=10:00	DEXT ROSV	0.890 0.880 0.989 0.929 0.978 0.978 1.020 1.020 1.020 0.984 0.984 0.854	:=11:00	ROSV	0.834 0.891 0.890 0.885 0.885 0.813 0.842 0.842 0.872 0.905 0.935 0.935 0.935 1.040 1.040
	LACT	0.292 0.308 0.322 0.250 0.251 0.202 0.192 0.186 0.172 0.174 0.144	DOSETIME=11:00	LACT	0.183 0.234 0.269 0.269 0.341 0.350 0.350 0.350 0.250 0.253 0.163 0.163
FLAPWT=22.39 :inued)	DEXT	1.150 1.150 1.150 1.150 1.150 1.140 1.160 1.160 0.950 0.950	FLAPWT=23.95	DEXT ROSA	1.160 1.180 1.160 1.170 1.180 1.180 1.190 1.190 1.200 1.210 1.210 1.240 1.250
PHASE=2 FLAPWT: (continued)	LACT ATEA	0.029 0.032 0.033 0.033 0.032 0.030 0.031 0.031 0.028 0.028		LACT	0.023 0.023 0.023 0.024 0.024 0.024 0.027 0.027 0.016 0.016 0.016 0.016 0.016
	MEAN	7.1.02 7.1.03 7.03 7.03 7.03 7.03 7.03 7.03 7.03 7	PHASE=1	MEAN FLOW	0.93 0.94 0.95 0.95 0.98 0.98 0.98 0.98 0.98 0.98 0.98
ANIMAL/SIDE=95-221-5-L	MED	35.55 35.55 35.55 35.50	E=95-225-6-R	TEMP	% # # # # # # # # # # # # # # # # # # #
L/SIDE=	BP MEAN	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1DE=95·	BP MEAN	6 6 8 6 5 3 6 4 4 5 6 5 5 6 5 6 5 6 5 6 6 6 6 6 6 6
ANIMA	ART MEDPH	7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,	ANIMAL/SID	ART Medph	44444444444444444
/04/95	HUMI DITY	38.2 38.6 38.6 38.6 37.6 37.6 37.7 37.7 37.8 38.6 38.6 38.6		HUMI	44444444444444444444444444444444444444
DATE=05/04/95	AIR TEMP	36.7 36.7 36.7 36.8 36.8 37.0 37.0 37.0 37.0	DATE=05/11/95	AIR TEMP	35.00 35
FLAPN0=2550	REL- TIME	1.00 2.50 2.50 3.50 5.50 6.50 8.00		REL- TIME	-1.00 -0.75 -0.55
- FLAPN	ACTL TIME	11:00 11:30 12:00 12:00 13:00 14:00 15:00 17:00 17:30 17:30	FLAPN0=2553	ACTL TIME	10:00 10:15 10:15 10:15 11:30
	TARG	11:00 11:30 12:30 13:30 14:00 14:30 15:00 16:30 17:30 18:00		TARG	10:00 10:15 10:30 11:30 11:30 12:30 12:30 14:00 15:30 15:30 16:30 17:30 18:30 18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SLUC	0.01	0.22	0.36	0.51	0.68	0.83	96.0	1.12	1.26	1.40	1.52	1.68	1.8	2.01	2.19	2.37	2.39	2.58	2.81
NCSU=No -	GLUC	0.66	0.33	0.27	0.30	0.35	0.29	0.26	0.32	0.27	0.29	0.24	0.32	0.35	0.30	0.36	0.35	0.02	0.38	0.45
MEDVOL=471	ADJ RESIS	88.4 56.4	54.8	53.5	51.2	54.3	54.0	55.4	55.6	48.5	9.09	61.0	57.3	53.1	60.3	26.4	60.4	63.3	61.5	63.0
MEDVO	ADJ FLOW	0.98	0.95	9.93	96.0	0.94	0.93	0.0	0.93	0.95	0.91	0.93	.01	9.	96.0	26.0	0.94	0.92	0.94	0.92
GROUP=E tOH	VRE- SIST	80.2	49.8	0.84 48.6	7.97	49.3	49.0	50.3	50.5	0.44	55.0	55.3	52.0	48.2	54.7	54.2	54.8	57.4	55.8	57.1
	LACT	0.16	0.71	50.1	-	0.95	1.25	1.32	1.03	1.12	1.12	1.39	1.10	0.99	1.13	0.94	0.91	6.95	1.40	0.92
DOSETIME=10:30	DEXT ROSV	0.936	1.060	1.080	1.070	1.060	1.070	1.070	1.070	1.070	1.080	1.110	1.080	1.090	1.110	1.090	1.090	1.210	1.060	1.060
	LACT	0.065	0.111	0.135	0.151	0.154	0.168	0.161	0.152	0.140	0.150	0.151	0.146	0.143	0.147	0.143	0.140	0.161	0.218	0.183
FLAPWT=22.95	DEXT	1.170	1.180	1.180	1.180	1.190	1.180	1.170	1.190	1.170	1.190	1.200	1.190	1.210	1.220	1.220	1.220	1.230	1.200	1.230
PHASE=2 F	LACT	0.028	0.026	0.028	0.029	0.030	0.030	0.029	0.029	0.028	0.027	0.026	0.025	0.024	0.023	0.021	0.022	0.022	0.022	0.026
	MEAN	1.09	1.05	1.02	1.06	1.04	1.02	1.00	1.03	1.05	1.00	1.03	1.12	1.1	1.06	1.07	1.04	1.01	1.04	1.02
ANIMAL/SIDE=95-225-6-L	MED	36.4	36.3	36.3	36.3	36.3	36.6	36.6	36.3	36.3	36.2	36.1	36.1	36.3	36.3	36.3	36.3	36.3	36.3	36.3
AL/SIDI	BP MEAN	87 56	25	6 5	64	51	20	20	25	94	55	25	28	23	28	28	22	28	28	28
-	ART MEDPH	7.4	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=05/11/95	HUMI DITY	38.3	38.1	37.7	37.5	37.8	37.2	38.1	37.2	37.1	37.3	38.0	38.0	36.7	36.9	37.6	43.2	38.0	38.0	37.6
DATE=(	AIR TEMP	37.3	37.5	37.6 37.4	37.5	37.6	37.7	37.6	37.6	37.6	37.5	37.7	37.5	37.6	37.6	37.6	37.6	37.6	37.6	37.6
FLAPN0=2554	REL- TIME	-1.00	-0.50	o-0-	0.50	9.	1.50	2.00	2.50	3.00	3.50	7.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00
FLAP	ACTL TIME	9:30	10:00	10:15	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
!	TARG	0£:6	10:00	10:15	1:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	onno CUM	0.00 0.20 0.41 0.62 1.69 1.11 1.11 1.11 1.20 5.74 5.36 6.63 6.63 7.70	CUM CUM	0.01 0.028 0.53 1.06 1.33 1.06 3.51 7.44 7.45 7.45 7.45
NCSU=Yes	GLUC GI	0.90 0.83 0.84 0.88 0.88 1.108 1.108 1.108 1.108 1.108 1.108 1.103	NCSU=Yes GLUC	
MEDVOL=363 N	ADJ RESIS	43.4 49.1 47.7 45.9 47.9 43.4 47.9 50.9 50.9 57.5 86.6 87.0 99.6 99.6 99.6	MEDVOL=463 N	31.8 33.1 28.3 28.3 27.8 35.3 37.5 47.1 54.7 65.6 65.3
	ADJ FLOW	0.67 0.58 0.58 0.57 0.58 0.65 0.65 0.67 0.72 0.69 0.72 0.72	5	1.04 1.103 1.120 1.120 1.120 1.120 1.051 1
GROUP=No Topical	VRE- SIST	30.4 33.3 33.3 33.3 33.3 33.3 33.3 33.3	GROUP=No Topical LACT VRE- ,	28.3 29.5 29.5 29.6 29.6 29.6 33.5 33.5 26.9 26.9
GROUP=	LACT	0.43 0.57 0.77 0.85 1.00 1.00 1.00 1.10 1.10 1.00 1.00 1.0	GROUP= LACT	0.66 0.82 0.98 0.99 0.99 0.93 0.93 0.93
DOSETIME=11:30	DEXT ROSV	0.682 0.714 0.657 0.657 0.669 0.687 0.687 0.688 0.695 0.761 0.761 0.761 0.761 0.956 0.956	DOSETIME=11:15 LACT DEXT	0.776 0.806 0.876 0.876 0.903 0.874 0.827 0.827 0.827 0.827 0.827 0.827
DOSETIM	LACT	0.206 0.343 0.486 0.548 0.548 0.548 0.545 0.656 0.656 0.678 0.288 0.303 0.303	DOSETIM LACT ATEV	0.183 0.282 0.282 0.278 0.314 0.353 0.353 0.358 0.368 0.368 0.370 0.350 0.260
FLAPWT=27.99	DEXT	1.120 1.140 1.140 1.140 1.210 1.200 1.190 1.180 1.180 1.200 1.190 1.190	FLAPWT=25.48 ACT DEXT	1.030 1.200 1.200 1.240 1.240 1.250 1.200 1.190 1.170 1.180
	LACT	0.017 0.017 0.001 0.001 0.002 0.016 0.016 0.018 0.018 0.018 0.018 0.018		0.015 0.018 0.012 0.014 0.017 0.016 0.017 0.017 0.018
PHASE=1	MEAN	0.96 0.85 0.87 0.87 0.98 0.99 0.99 1.01 1.01 1.03	PHASE=1	1.15 1.15 1.28 1.28 1.02 1.02 1.03 0.98 0.98
E=95-65-11-R	MED TEMP	38.55.25.25.25.25.25.25.25.25.25.25.25.25.	E=95-65-11-L BP MED	26.22.23.26.25.26.23.26.25.25.25.25.25.25.25.25.25.25.25.25.25.
_	BP MEAN	244066666666666666666666666666666666666	_ ≘ ₃	22 23 24 24 24 24 25 26 26 26 26 26 26 26 26 26 26 26 26 26
ANIMAL/SI	ART Medph	44444444 44444444 4444444 4444444 444444	ANIMAL/S ART	
	HUMI	52.4 50.24 50.25 50.27 50.27 64.07 64.07 64.07 64.09 64.00 6	¥ ?	40.5 41.2 41.2 41.2 39.7 38.7 38.7 38.7 38.7 38.7 38.7 38.7 38
DATE=08/30/95	AIR TEMP	355.22 355.22 355.23 35	DATE=08/30/95	37.6 37.0 37.0 37.1 37.3 37.3 37.5 37.5 37.5
	REL- TIME	-1.25 -0.75 -0.75 -0.50 -0.50 -0.55		2.1.2 2.1.0 2.2.0 3.2.0 3.2.0 3.3.0 3.0
FLAPN0=2555	ACTL TIME	10:15 10:30 10:45 11:30 11:30 12:30 13:30 14:30 14:30 15:30 16:30 17:30 17:30 18:30 18:30 19:30	FLAPNO=2556 ACTL RE	10:00 10:15 10:35 10:45 11:45 11:45 12:45 13:45 14:15 14:15 14:15 15:45
1	TARG	10:15 10:30 11:00 11:30 12:30 12:30 13:30 14:00 15:00 15:00 15:00 16:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30	TARG	10:00 10:15 10:30 10:45 11:15 11:15 12:45 12:45 13:45 14:15 14:15 15:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

•			i						:	
	CUM	6.41 6.41 6.68		OLUC	0.01 0.17 0.36 0.56	1.21 1.62 2.06 2.50	2.85 3.24 3.63 4.00	6.35 6.45 6.73 5.73 6.13		0.01
NCSU=Yes	GLUC UTIL	0.54 0.61 0.58 0.55 0.55	NCSU=Yes	GLUC	0.68 0.63 0.76 0.83	0.82 0.87 0.88	0.73 0.78 0.73	0.70 0.62 0.56 0.48 0.40 0.40	NCSU=Yes GLUC UTIL	0.69
MEDVOL=463	ADJ RESIS	56.9 61.0 59.1 61.3 59.3 56.6	MEDVOL=479	ADJ RESIS	36.9 34.2 29.5 29.7	30.8 30.8 30.5 31.3	35.6 34.3 37.2 38.8	43.3 44.2 48.5 50.2 52.1	MEDVOL=494	30.3
	ADJ FLOW	0.93 0.90 0.91 0.93 0.93		ADJ FLOW	0.87 0.88 0.95 0.94	98888	0.93 0.93 0.91	0.95 0.95 0.95 0.95 0.95		0.96
GROUP=No Topical	VRE- SIST	50.7 54.5 52.7 54.7 52.9 51.7	GROUP=No Topical	VRE- SIST	34.0 31.6 27.2 27.5	28.3 28.3 28.1	32.8 34.3 35.8	37.4 40.0 40.8 44.8 43.7 48.0	GROUP=No Topical LACT VRE- A DEXT SIST FL	28.9
GROUP=)	LACT	1.15 1.00 1.01 1.04 1.08 1.10	GROUP=	LACT	0.34 0.66 0.78 0.86	0.98	1.00 0.97 0.99 0.97	0.99 0.98 0.89 0.94 0.98		0.39
E=11:15	DEXT	1.000 0.954 0.949 0.979 0.962 0.955	DOSETIME=11:01	DEXT	0.724	0.661	0.754 0.701 0.706 0.714	0.734 0.810 0.829 0.878 0.913 0.934 0.967	DOSETIME=10:45 LACT DEXT ATEV ROSV	0.754
DOSETIME=11:15	LACT	0.273 0.274 0.264 0.260 0.256 0.257 0.249	DOSETIM	LACT ATEV	0.164 0.278 0.357 0.433	0.508 0.529 0.543	0.427 0.471 0.476 0.460	0.457 0.372 0.338 0.337 0.280 0.259	DOSETIN	0.193
FLAPWT=25.48 continued)	DEXT	1.220 1.210 1.190 1.210 1.190 1.200	FLAPWT=35.5	DEXT	1.150 1.160 1.210 1.210	1.170	1.170	1.180 1.200 1.200 1.200 1.200 1.200	FLAPWT=38.73 ACT DEXT	1.200
3	LACT	0.019 0.019 0.020 0.020 0.009 0.009		LACT	0.019	0.019 0.020 0.017	0.009 0.024 0.016 0.017	0.017 0.012 0.013 0.010 0.010		0.018
PHASE=1	MEAN	1.05 1.01 1.02 1.05 1.05	PHASE=1	MEAN	0.94 0.95 1.03	0.96	1.01	0.94 1.03 1.03 0.96 1.03	PHASE=1	1.01
E=95-65-11-L	MED	36.3 36.3 36.4 36.4 36.4 36.4	DE=95-65-10-R	MED	35.3 35.9 35.9	36.1	36.2 36.1 36.3	26.23 26.23 26.33	DE=95-65-10-L BP MED MEAN TEMP	34.4
(DE=95-0	BP MEAN	25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27		BP MEAN	28888	27.22	****	32 44 43 44 45 44 45 45 45 45 45 45 45 45 45 45		29
ANIMAL/SID	ART MEDPH	7.7.7.7.7. 2.8.4.2.2.4.4.	AN IMAL/SI	ART MEDPH	4444	4.7.7	4.7.7.7.7.7.4.7.7	4444444	ANIMAL/SI ART MEDDH	7.3
	HUMI DITY	39.1 38.9 39.1 37.6 39.1 39.4		HUMI	43.0 41.8 41.8 41.7	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	40.8 41.0 42.0	42.4 40.3 40.0 40.5 40.0	! 낮 ?	44.1
DATE=08/30/95	AIR TEMP	37.5 37.5 37.5 37.6 37.7 37.5	DATE=08/31/95	AIR TEMP	36.0 36.5 36.6 36.7	36.98	37.0 37.0 37.1 37.0	37.1 37.1 37.1 37.1 37.1	DATE=08/31/95	36.1
	REL- TIME	5.00 5.50 6.50 7.50 8.00		REL- TIME	-1.02 -0.77 -0.52 -0.27	0.48	2.48 3.48 3.98	7.48 6.98 7.48	: 5	-1.00
FLAPN0=2556	ACTL TIME	16:15 16:45 17:15 17:45 18:15 19:15	FLAPN0=2557	ACTL TIME	10:00 10:15 10:30 10:45	11:30 12:00 12:30	13:30 14:00 14:30 15:00	15:30 16:30 17:00 17:30 18:30	FLAPNO=2558 ACTL RI	11ME
	TARG TIME	16:15 16:45 17:45 17:45 18:15 18:45		TARG	10:00 10:15 10:30 10:45	11:30 12:00 12:30	13:30 14:30 15:00	15:30 16:00 17:00 17:30 18:00 18:30		11ME 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	GLUC	0.34 0.34 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.6		CUM	0.01
NCSU=Yes	GLUC UT1L	0.52 0.65 0.65 0.65 0.63 0.54 0.35 0.35 0.37	NCSU=Yes	GLUC UT1L	0.59
MEDVOL=494	ADJ RESIS	26.13 26.13 26.13 27.18 27.18 27.18 27.19 27.10	MEDVOL=475	ADJ RESIS	26.0
	ADJ FLOW	0.99 0.99 0.93 0.93 0.93 0.93 0.93 0.93	:	ADJ FLOW	0.92
GROUP=No Topical	VRE- SIST	28.8 25.7 22.7 26.2 26.2 26.2 27.6 27.6 27.6 27	GROUP=No Topical	VRE- SIST	23.8
GROUP=N	LACT	0.65 0.67 0.77 0.82 0.88 0.99 0.99 0.99 1.09 1.01 1.01 1.00	GROUP=	LACT	0.28
DOSETIME=10:45	DEXT ROSV	0.847 0.773 0.773 0.773 0.775 0.770 0.770 0.826 0.851 0.958 0.958	DOSETIME=10:30	DEXT ROSV	0.775
DOSETIM	LACT	0.221 0.297 0.355 0.403 0.413 0.412 0.411 0.417 0.405 0.369 0.295 0.264 0.257	DOSETIN	LACT	0.126
FLAPWT=38.73 continued)	DEXT	1.170 1.210 1.240 1.240 1.180 1.180 1.190 1.190 1.190 1.190	FLAPWT=40.82	DEXT	1.170
3	LACT	0.011 0.020 0.019 0.017 0.013 0.014 0.015 0.013 0.013 0.015	; _	LACT	0.016
PHASE=1	MEAN	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06	PHASE=	MEAN	1.01
ANIMAL/SIDE=95-65-10-L	MED	2.44.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8	/SIDE=95-65-9-L	MED	35.8
IDE=95·	BP MEAN	23 23 23 23 23 23 25 25 25 25 25 25 25 25 25 25 25 25 25	SIDE=9	BP MEAN	25
IIMAL/S	ART Medph	44444444554445444544	ت ۔	ART Medph	7.4
	HUMI DITY	42.05 42.05	•	HUMI	43.9
DATE=08/31/95	AIR	3,5000000000000000000000000000000000000	DATE=09/07/95	AIR	35.7
	REL- TIME	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	2	REL- TIME	-0.97
FLAPNO=2558	ACTL TIME	10:00 10:15 10:15 11:15 11:15 12:45 14:45 15:45 16:15 16:15 16:15 16:15 16:15 16:15 16:15 16:15 16:15 16:15 16:15	FLAPNO=2560	ACTL TIME	9:32
	TARG	10:00 10:00 11:155 12:155 13:155 14:1		TARG	9:30

0.13 0.29 0.24 0.64 1.30 1.30 1.62 1.30 2.23 3.16 3.32 3.32 3.32 35.0 33.7 34.7 34.7 35.7 35.8 35.8 35.5 36.6 45.5 45.5 45.2 0.92 0.92 0.93 0.92 0.92 0.92 0.93 0.93 0.93 32.0 30.8 31.8 31.8 30.0 31.4 32.5 32.5 33.5 41.6 41.6 41.6 41.6 42.8 0.63 0.80 0.84 0.92 1.03 1.05 1.05 1.07 1.07 1.07 0.808 0.774 0.774 0.715 0.716 0.699 0.713 0.821 0.915 0.915 0.249 0.341 0.387 0.474 0.498 0.492 0.465 0.329 0.287 0.254 0.254 1.190 1.170 1.170 1.170 1.170 1.180 1.150 1.190 1.170 1.170 0.008 0.008 0.008 0.005 0.018 0.017 0.011 0.015 0.005 0.005 0.005 1.00 0.98 0.98 0.99 1.02 1.02 1.02 35.4 35.5 35.7 35.7 36.5 36.7 36.5 36.5 36.5 36.5 36.5 36.5 45.1 44.5 44.1 43.6 43.7 43.7 43.1 42.6 42.6 42.5 42.5 35.54 -0.75 -0.50 9:45 10:00 10:00 10:30 11:30 11:30 12:30 13:30 14:30 14:30 15:30 16:00 9:45 10:00 10:05 11:30 11:30 12:30 12:30 13:30 14:30 14:30 15:30 15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	Wno CUM	3.61 3.85 3.85	4.11	OLUC CUM GLUC	0.01	0.59	1.14	1.62	1.98 2.12 2.12	2.37	2.62	2.87 3.12 3.26		CUM	0.01 0.19 0.39
NCSU=Yes	GLUC UTIL	0.27 0.25 0.22 0.22	0.30	GLUC UTIL	0.70	0.58	0.56	0.47	0.28	0.24	0.26	0.25 0.28 0.28	NCSU=Yes	GLUC UTIL	0.86 0.72 0.79
MEDVOL=475	ADJ RESIS	45.5 41.6 41.9 40.0	89 40.3 Menvol =4.74	ADJ RESIS	50.3 44.4 58.5	40.8	41.6 50.1	42.0	42.7	36.3 36.1	38.6 37.0	38.8 40.7 39.4	MEDVOL=480	ADJ RESIS	41.3 39.7 39.3
	ADJ FLOW	0.90 0.94 0.91	0.89	ADJ FLOW	0.90	0.93	0.91	0.9	0.89	0.94	0.85	0.88 0.84 0.91		ADJ FLOW	0.94 0.91 0.92
GROUP=No Topical	VRE- SIST	41.6 38.0 38.4 36.6	0.93 36.9 0.8 GROUP=No Tonical	VRE- SIST	45.9	40.2 37.3 45.4	38.0	38.4	39.0 35.5	33.2	33.3	35.4 37.2 36.0	GROUP≕No Topical	VRE- SIST	38.2 36.7 36.4
	LACT	1.00 1.13 1.36	0.93	LACT	0.13	0.79	1.05	0.76	 8	1.19	1.03	1.02	GROUP=	LACT	0.27 0.62 0.71
DOSETIME=10:30	DEXT	0.972 0.993 0.979 1.010	0.220 0.951 DOSETIME=11:00	DEXT ROSV	0.819 0.836 0.917	0.888 0.866	0.901	0.947	1.030	1.050	1.040	1.040	DOSETIME=10:30	DEXT	0.726 0.775 0.766
DOSET	LACT	0.208 0.205 0.207 0.213	0.220 DOSETI	LACT	0.054 0.114 0.162	0.217	0.267	0.168	0.131	0.126	0.123	0.122 0.118 0.122	DOSETIA	LACT ATEV	0.125 0.227 0.282
FLAPWT=40.82	DEXT	1.160 1.160 1.130 1.160	025 1.160 FLAPWT=25.44	DEXT	1.120	1.150	1.140	1.150	1.150	1.150	1.140	1.150 1.150 1.140	FLAPWT=28.02	DEXT ROSA	1.120 1.120 1.140
_ 3	LACT	0.020 0.017 0.011 0.009	o'	LACT	0.015 0.015 0.016	0.011 0.016 0.013	0.015	0.014	0.008	0.007	0.006	0.002		LACT	0.017 0.014 0.016
PHASE=1	MEAN	0.99	0.98 PHASE=1	MEAN	0.98 1.01	1.00 0.97 0.93	9.7	1.03	0.98	1.03	2.0.	0.98	PHASE=1	MEAN	1.02 0.98 0.99
L/SIDE=95-65-9-L	MED TEMP	36.5 36.4 36.4	30 30.4 SIDE=95-64-5-R	MED TEMP	36.4 36.9 37.1	37.1 36.4 37.1	37.2 37.2	37.3	37.3	37.3 37.3 57.3	37.3	37.3 37.3 37.6	SIDE=95-64-5-L	MED	37.1 37.8 38.0
SIDE=9!	BP MEAN	41 38 37	so SIDE=95	BP MEAN	45 45	7 7 7 7 7 7 7	8 4 8	37.23	8 %	* * *	2 2 2	222	IDE=95	BP MEAN	36 33
AN IMAL/	ART MEDPH	4.7.7.4.7.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4	•	ART Medph	4.7. 4.7. 4.7.	4.7. 4.7. 4.7.	7.4	. 7. 7.	7.4	4.4.4	7.4	7.4 7.4 7.5	AN I MAL/S	ART Medph	7.4
	HUMI	42.2	n	HUMI	40.4 39.4 38.8	38.5 37.1 38.3	38.0 37.8 7	37.6 37.7	37.9 38.0	28.5 28.5 2.5 2.5 5.5	38.3	38.6 38.7 38.8		HUMI	41.5 40.6 40.4
DATE=09/07/95	AIR TEMP	36.3 36.3 36.4	DATE=09/13/95	AIR	37.2 37.8 38.0	38.1 37.7 38.2	38.3 38.4 38.4	38.3	38.3	38.3	38.3 38.3	38.3 38.3 38.3	DATE=09/13/95	AIR	38.2 38.7 38.8
	REL- TIME	6.00 7.00 7.50 8.50	3	REL- Time	-0.75	0.50	5.58	3.50	3.50	5.00	6.50	7.00 7.50 8.00		REL- TIME	-1.00 -0.75 -0.50
FLAPNO=2560	ACTL TIME	16:30 17:00 17:30 18:00	FLAPNO=2561	ACTL TIME	10:00 10:15 10:30	11:00	12:30 13:30	13:30 14:00	14:30 15:00	16:00 16:30	17:00 17:30	18:00 18:30 19:00	FLAPN0=2562	ACTL TIME	9:30 9:45 10:00
	TARG	16:30 17:00 17:30 18:00		TARG		11:00						18:00 18:30 19:00		TARG	9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	SU.	GLUC	0.56	0.76	1.12	1.49	1.82	2.17	5.49	2.83	3.15	3.45	3.69	3.94	4.20	4.45	79.4	7.90	5.12	5.36
NCSU=Yes	GLUC	UTIL	0.74	0.73	0.74	0.73	99.0	0.71	0.63	0.69	0.64	0.53	0.54	0.49	0.53	0.49	0.45	0.47	0.44	0.47
MEDVOL=480	ADJ	RESIS	39.3	39.3	38.1	41.1	40.2	40.7	43.7	45.0	44.3	43.7	44.5	45.6	43.5	40.5	47.2	45.5	48.1	43.5
_	ADJ	FLOW	0.92	0.92	0.89	0.85	0.92	0.93	0.89	0.95	0.92	96.0	0.94	0.92	0.94	1.01	0.87	0.0	0.87	0.97
GROUP=No Topica	VRE-	SIST	36.4	36.4	35.2	38.0	37.2	37.6	7.07	38.8	41.0	40.4	41.2	45.2	40.2	37.4	43.6	42.1	4.4	40.2
GROUP=	LACT	DEXT	0.89	0.94	1.02	26.0	1.10	1.02	1.09	96.0	0.93	1.08	1.05	1.03	0.97	1.1	7.08	0.97	0.95	0.95
DOSETIME=10:30	DEXT	ROSV	0.782	0.785	0.774	0.781	0.809	0.814	0.834	0.836	0.852	0.881	0.892	0.919	0.909	0.930	0.928	0.925	0.923	0.922
DOSETIA	LACT	ATEV	0.323	0.340	0.367	0.370	0.348	0.333	0.333	0.306	0.282	0.262	0.261	0.239	0.237	0.234	0.235	0.218	0.207	0.199
FLAPWT=28.02 continued)	DEXT	ROSA	1.130	1.130	1.130	1.150	1.120	1.140	1.140	1.150	1.150	1.120	1.140	1.150	1.150	1.140	1.150	1.150	1.140	1.130
_ ~	LACT	ATEA	0.015	0.015	0.003	0.013	0.007	0.00	0.00	0.005	90.0	0.003	0.001	0.00	0.004	0.000	0.000	0.00	0000	0.001
PHASE=	MEAN	FLOW	0.99	0.99	0.97	0.92	9.	1.01	0.97	1.03	1.0	1.04	1.02	9.	1.02	1.10	0.94	0.98	0.95	1.05
MAL/SIDE=95-64-5-L	Æ	TEMP	37.6	37.4	37.3	37.3	37.4	36.9	36.8	36.8	36.8	36.8	36.8	36.8	36.9	37.4	37.1	37.0	37.0	37.1
S1DE=9!	ВР	MEAN	36	36	34	35	37	38	36	40	14	. 75	75	75	14	41	41	41	45	75
AN I MAL /	ART	MEDPH	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.5	7.4	7.4	7.4	7.5
3/95	EMI MI	DITY	40.4	40.4	39.7	40.1	39.9	40.1	40.2	40.2	40.3	40.3	40.6	41.0	40.5	39.2	40.5	41.0	41.2	41.3
DATE=09/13/95	AIR	TEMP	38.5	38.4	38.2	38.3	38.3	38.4	37.9	37.8	37.7	37.8	37.8	37.8	38.0	38.3	38.1	38.0	38.1	38.1
	REL-	TIME	-0.27	0.0	0.50	0.0	1.50	2.00	2.50	3.00	3.50	7.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00
FLAPNO=2562	ACTL	TIME	10:14	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	TIME	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	<b>₩</b>	GLUC	0.01	0.20	0.35	0.47	0.57	0.7	6.0	1.22	1.46	1.68	1.95	2.18	2.40	2.62	2.79	<b>5.</b> %	3.19	3.42
NCSU=Yes	GLUC	UTIL	0.75	0.74	09.0	0.49	0.38	0.41	0.45	0.44	0.49	0.43	0.55	0.45	0.45	0.43	0.34	0.41	0.41	0.45
MEDVOL=509	ADJ	RESIS	62.5	51.5	49.0	47.1	50.1	49.5	9.74	53.4	52.0	51.8	44.1	49.0	43.4	48.2	8-94	48.6	45.9	45.7
	ADJ	FLOW	0.98	0.9	1.02	1.04	0.0	96.0	0.97	0.94	0.94	0.95	1.13	9.	1.08	0.98	1.01	0.93	1.02	1.03
GROUP=No Topical	VRE-	SIST	61.3	50.5	48.1	46.2	49.2	48.2	46.7	52.4	51.0	50.8	43.3	48.0	45.5	47.2	42.9	47.6	42.1	41.9
GROUP	LACT	DEXT	0.16	0.36	0.55	0.73	0.99	0.93	0.97	1.05	0.94	9.0	.0	0.9	1.05	0.99	1.27	0.93	°.8	0.90
Æ=11:00	DEXT	ROSV	0.812	0.848	0.923	0.972	0.973	0.66.0	0.968	0.944	0.944	0.959	0.956	99.0	296.0	0.977	1.000	996.0	0.984	0.977
DOSETIM	LACT	ATEV	0.057	0.117	0.156	0.162	0.192	0.180	0.203	0.219	0.207	0.196	0.213	0.195	0.189	0.182	0.186	0.175	0.165	0.173
FLAPWT=25.48	DEXT	ROSA	1.130	1.160	1.170	1.170	1.150	1.170	1.160	1.140	1.160	1.150	1.160	1.150	1.140	1.160	1.140	1.150	1.150	1.160
FLAPW	LACT	ATEA	0.007	0.004	0.019	0.017	0.016	0.013	0.017	0.013	0.003	0.012	0.010	0.010	0.008	0.00	0.008	0.003	0.00	0.009
PHASE=1	MEAN	FLOW	1.00	1.01	1.04	9.1	0.92	0.98	0.99	96.0	96.0	0.97	1.16	1.02	1.11	9.0	1.03	0.95	1.05	1.05
5-3-16-R	MED	TEMP	34.2	34.1	34.1	34.1	33.2	34.1	33.9	33.9	33.9	33.9	34.8	34.7	34.7	34.6	34.6	34.6	34.6	34.6
/SIDE=95-	B	MEAN	61	51	2	67	45	25	94	20	65	67	20	65	47	47	25	45	77	7,7
AN IMAL/	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.5	7.4	7.4	7.5	7.4
	HOH	DITY	52.9	52.8	52.6	52.4	51.8	52.6	51.5	51.6	51.8	52.2	49.0	48.5	48.3	47.8	48.1	48.1	47.8	48.0
DATE=09/20/95	AIR	TEMP	34.5	34.5	34.5	34.5	34.2	34.5	34.4	34.4	34.4	34.5	35.2	35.2	35.2	35.2	35.2	35.1	35.1	35.1
2563 04	REL -	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	7.00	4.50	2.00	5.50	6.00	6.50
FLAPN0=2563	ACTL	TIME	10:00	10:15	10:30	10:45	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30
	TARG	TIME	10:00	10:15	10:30	10:45	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30

## TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	3.61 3.84 4.08		GLUC	0.01	0.35	0.54	0.65	0.87	1.12	1.22	1.49	1.74	1.91	2.04	2.30	2.47	: S	SULUC	0.01 0.17 0.31 0.47
NCSU=Yes	GLUC UTIL	0.37 0.46 0.50	NCSU=Yes	GLUC	1.24	0.0	0.29	0.23	0.26	0.26	0.20	0.32	0.25	0.34	0.27	0.32	0.33	NCSU=Yes	GLUC UTIL	0.58 0.65 0.55 0.64 0.63
MEDVOL=509	ADJ RESIS	39.9 39.7 40.0	0V0L=487	ADJ RESIS	73.3	53.8	52.2	51.9 48.5	41.6	39.3	35.5 35.5	34.5	33.8 83.8	32.1	34.5	32.2	32.9	MEDVOL=486.9	ADJ RESIS	50.4 45.0 50.6 50.0
	ADJ FLOW	1.10	at ME	ADJ FLOW	0.89	0.9	0.9	0.91	0.94	0.91	0.9	96.0		1.03	9.6	0.9	1.00		ADJ FLOW	0.93 1.02 1.00 1.00
GROUP=No Topical	VRE- SIST	39.1 38.9 39.3	GROUP=No Topical MEDVOL=487	VRE- SIST	68.8 56.3	50.5	48.5	48.7 45.5	39.0 38.4	36.9	33 3 33 3 34 3	32.4	31.7	30.1	32.4	30.2	30.8	GROUP=No Topical	VRE- SIST	47.2 42.2 47.5 46.9 51.0
	LACT	1.25 0.88 0.87		LACT	0.02		98.88											GROUP=I	LACT	0.39 0.62 0.75 0.80 0.83
DOSETIME=11:00	DEXT ROSV	0.990 0.960 0.933	DOSETIME=10:45	DEXT	0.626	1.030	1.040	1.050	1.040	1.040	1.050	1.030	1.040	1.040	1.050	1.030	1.030	:=10:15	DEXT	0.824 0.809 0.850 0.816 0.806
DOSETIM	LACT	0.183 0.160 0.181	DOSETIM	LACT ATEV	0.028	0.100	0.140	0.130	0.117	0.130	0.135	0.129	0.130	0.130	0.107	0.124	0.127	DOSETIME=10:15	LACT ATEV	0.133 0.209 0.246 0.281 0.281
(=25.48 led)	DEXT ROSA	1.130 1.140 1.130	FLAPWT=24.92	DEXT	1.150	1.150	1.160	1.160 1.120	1.150	1.150	1.130	1.160	1.140	1.170	1.160	1.160	1.160	FLAPWT=32.28	DEXT	1.140 1.150 1.140 1.140
FLAPWT=25.48 (continued)	LACT	0.008 0.002 0.009		LACT	0.019	0.018	0.020	0.019	0.005	0.019	0.019	200.0	0.004	0.003	0.008	0.008	0.005	FLAPWT	LACT	0.010 0.010 0.022 0.021 0.015
PHASE=1	MEAN	1.13 1.08 1.07	PHASE=1	MEAN	1.00	1.05	1.03	1.01	0.0	0.98	1.05	1.02	1.02	1.10	7.05	.0.	1.07	PHASE=1	MEAN	1.00 1.09 0.99 1.07
DE=95-3-16-R	MED	34.6 34.6 34.6	DE=95-3-16-L	MED	33.9	34.0	33.6 34.1	34.1 34.1	34.1	34.3	34.2 34.2	33.2	34.2 34.2	34.2	34.2	34.7 34.7	34.1	DE=95-3-12-L	MED	33.3 33.7 33.9 33.9
	BP MEAN	75 74 75	-	BP MEAN	59 55	53	2 2	47 46	38	38	% %	33	3 33	33	33	<u>ب</u> ب	33	.DE=95	BP MEAN	47 47 50 52
ANIMAL/S	ART	7.4 7.4 7.4	ANIMAL/S	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.4	4.4	7.4	ANIMAL/SI	ART	4444
	HUMI DITY	47.7 47.6 47.7		HUMI	50.6	50.5	49.5	49.1	9.67	47.6	47.7	46.2	46.7	4.97	7.97	45.5	45.7		HUMI	48.9 48.0 47.7 47.2 47.1
DATE=09/20/95	AIR TEMP	35.1 35.1 35.0	DATE=09/20/95	AIR TEMP	34.6	34.5	34.3 34.6	34.7	34.6	34.8	34.6	34.6	34.8	34.8	34.8	34.7	34.7	DATE=09/21/95	AIR	33.6 34.1 34.3 34.4
	REL- TIME	7.00 7.50 8.00		REL- TIME	-0.93	-0.50	0.00	1.0 1.50	2.00	3.00	3.50	4.50	5.00 5.00	6.00	6.50	7.50	8.00		REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAPNO=2563	ACTL TIME	18:00 18:30 19:00	FLAPN0=2564	ACTL TIME	9:49	10:15	10:45 11:15	11:45 12:15	12:45	13:45	14:15	15:15	15:45	16:45	17:15	17:45	18:45	FLAPN0=2566	ACTL TIME	9:15 9:30 9:45 10:00
1 1 1 1 1 1 1	TARG	18:00 18:30 19:00	! ! ! !	TARG	9:45	10:15 10:30	10:45 11:15	11:45	12:45	13:45	14:15	15:15	15:45	16:45	17:15	17:45	18:45		TARG	9:15 9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	OLUC CUM	1.23	1.77	2.26	2.72 2.93	3.17	3.63 3.83	4.05	4-47
NCSU=Yes	GLUC	0.66	0.48	0.48	77.0 0.49	0.47 0.51	0.42 0.40	0.43	0.41
MEDVOL=486.9	ADJ RESIS	52.3 57.1 72.1	67.4 67.5	64.1 65.7	63.4 59.7	59.5 53.0	56.0 53.6	54.9 52.3	53.0
	ADJ FLOW	0.99	0.93	0.95	0.91	0.92	0.91	0.93	0.92
o Topical	VRE- SIST	49.1 53.5 67.7	63.2	60.1 61.6	59.5 56.0	55.8 49.8	52.6 50.3	51.5 49.0	49.7
GROUP=No	LACT	1.05	1.15	1.02 0.96	0.89	0.97	0.89	0.8 0.8 8	0.88
=10:15	DEXT	0.795	0.831	0.856 0.873	0.841	0.831 0.848	0.888	0.899	0.885
DOSETIME=10:15	LACT	0.332	0.332	0.276	0.263	0.278	0.231	0.224	0.234
FLAPWT=32.28 (continued)	DEXT	1.130	1.100	1.10	1.110	1.090	1.120	1.130	1.110
FLAPWT (contin	LACT	0.024	0.023	0.018	0.024	0.028	0.024	0.030	0.035
PHASE=1	MEAN	1.06	1.00	1.02	1.00	1.01	0.97 1.00	0.99 1.02	0.99
.MAL/SIDE=95-3-12-L	MED	34.2	34.4	34.1 34.2	34.1	34.1 34.1	34.2	34.2	34.2
IDE=95.	BP MEAN	52	2 2 2	61	28 28	20 22	50	50 53	67
	ART Medph	7.4	2.5	7.5	7.4	7.4	7.4	7.4	7.4
/95 ANI	HUMI	49.2 49.1	48.4	47.3	46.9 46.9	47.5	47.2 47.0	47.3 48.1	47.7
DATE=09/21/95	AIR TEMP	34.0 34.0	35.7	34.6	34.6	34.6 34.6	34.6	34.7	34.7
	REL- TIME	1.00	2.00	3.00	4.90	5.80	6.00	7.00	8.00
FLAPN0=2566	ACTL TIME	10:45	12:15	13:15	14:15	15:15 15:45	16:15 16:45	17:15 17:45	18:15
	TARG	10:45	12:15	13:15	14:15	15:15 15:45	16:15 16:45	17:15	18:15

0.58 0.66 0.34 0.37 0.37 0.28 0.21 0.21 0.27 0.23 0.23 0.33 MEDVOL=476 NCSU=Yes ADJ RESIS 0.84 0.93 0.93 0.92 0.92 0.92 0.93 0.90 0.91 0.93 0.93 0.93 ADJ FLOW DATE=09/27/95 ANIMAL/SIDE=95-11-6-R PHASE=2 FLAPWT=30.38 DOSETIME=11:01 GROUP=ETOH VRE-SIST 0.07 0.22 0.25 0.25 0.81 1.17 1.72 1.00 0.99 0.99 0.91 0.91 0.91 0.93 0.93 LACT DEXT 0.839 0.860 0.929 1.010 0.979 0.961 1.000 1.060 DEXT ROSV 0.046 0.089 0.089 0.092 0.140 0.139 0.158 0.158 0.179 0.174 0.164 0.157 LACT 1.160 1.170 1.170 1.170 1.150 1.160 1.170 1.170 1.170 1.150 1.150 1.150 1.150 DEXT 0.022 0.023 0.023 0.023 0.024 0.020 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 LACT MEAN FLOW BP MEAN 855555864754444 ART Medph \*\*\*\*\*\*\*\*\*\*\*\*\*\*\* HUMI DITY AIR TEMP -- FLAPNO=2567 -1.02 -0.77 -0.77 -0.52 -0.27 -0.27 -0.27 -0.27 -0.27 -0.27 -0.52 10:00 10:15 10:30 11:30 11:30 11:30 12:30 14:30 15:30 15:30 16:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30 10:00 10:15 11:00 11:00 11:00 11:00 11:00 11:00 12:30 14:00 15:30 16:00 17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

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	CUM	2.57		CUM	0.01	0.18	0.19	0.83	1.15	1.81	2.49	2.80	3.09	3.60	3.85	4.11	4.39	4.85		GLUC	0.01 0.23 0.44 0.63 0.80 1.07
NCSU=Yes	GLUC	0.30	NCSU=Yes .	GLUC UTIL	0.04	0.26	0.05	0.62	0.64	0.66	0.66	0.63	0.58	0.50	0.50	0.51	0.56	0.46	NCSU=Yes	GLUC	1.22 0.88 0.82 0.77 0.70 0.56
	ADJ RESIS	43.0	MEDVOL=474	ADJ RESIS	85.0 91.3	83.6	79.1 80.5	81.1	7.6.6 7.9.6	70.2	70.0 70.4	70.5	2.6	7.57	71.9	7.69	9.99	65.0	MEDVOL=524	ADJ RESIS	44.6 33.5 30.3 35.7 29.7
MEDVOL=476	ADJ FLOW	0.95	MEDVO	ADJ FLOW	0.92	0.91	0.82	0.90	0.91	0.95		0.92	0.9	0.90	0.92	0.92	0.95	0.92	MEDVC	ADJ FLOW	1.08 1.19 1.14 1.12 1.07 0.92
GROUP=E tOH	VRE- SIST	39.4	GROUP=3 mg HD	VRE- SIST	77.6	76.4	72.2	74.1	70.0 69.3	64.1	64.3	64.4	66.3	67.0	65.7	63.4	60.0	59.4	GROUP=3 mg HD	VRE- SIST	45.1 38.9 33.8 30.6 30.3 36.1
	LACT	0.92		LACT	1.30	0.72	0.40	0.91	0.95	0.99	6.60	0.93	9.0	0.96	0.95	0.91	0.8 6.8	0.9%		LACT	0.04 0.20 0.36 0.45 0.89 0.98
DOSETIME=11:01	DEXT	0.993	DOSETIME=10:15	DEXT ROSV	1.120	1.006	1.120 0.793	0.792	0.785	0.788	0.792	0.814	0.827	0.871	0.872	0.875	0.877	0.882	DOSETIME=10:00	DEXT	0.490 0.685 0.745 0.764 0.823 0.823
	LACT	0.168	DOSETIA	LACT ATEV	0.035	0.132	0.042 0.368	0.344	0.366 0.381	0.379	0.347	0.341	0.324	0.295	0.286	0.277	0.268	0.276	DOSETI	LACT	0.046 0.118 0.176 0.205 0.234 0.330
FLAPWT=30.38 :inued)	DEXT	1.140	FLAPWT=32.47	DEXT	1.140	1.150	1.150	1.130	1.130 1.140	1.130	1.150	1.150	1.140	1,140	1.140	1.150	21.1	1.130	FLAPWT=34.97	DEXT	1.160 1.170 1.170 1.170 1.160
	LACT	0.033		LACT	0.027	0.028	0.030 0.035	0.037	0.039 0.038	0.039	0.024	0.030	0.031	0.036	0.031	0.028	0.031	0.038		LACT	0.020 0.024 0.021 0.022 0.022 0.029
-R PHASE=2 (con	MEAN	1.04	PHASE=2	MEAN FLOW	1.01	 	0.90 1.02	0.99	 8 8	1.05	. 6	1.03	1.00	1.00	1.01	1.01	4.0	1.0%	PHASE=2	MEAN	1.07 1.08 1.13 1.06 0.92
'SIDE=95-11-6-R	MED	37.6	SIDE=95-6-7-R	MED TEMP	37.3	36.5 37.4	37.3 37.4	37.6	37.7 37.9	37.9	37.1	37.1	37.1	37.1	37.2	37.2	37.2	37.2 37.3	SIDE=95-6-7-L	MED	36.3 36.6 36.7 36.9 37.2 37.3
L/SIDE:	BP MEAN	1,4	/SIDE=	BP MEAN	78 88	2 2	2 S	R	୧ %	29	S 3	8 3	9 7	67	3	75	63	<u>.</u> 8		BP MEAN	7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ANIMAL/	ART MEDPH	7.4	ANIMAL/	ART MEDPH	7.3	7.5	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.7	7.4	7.4	7.4	4.7	ANIMAL/	ART	444444
DATE=09/27/95	HUMI	37.8	/28/95	HUMI	41.7	40.4	41.0	38.3	38.4 36.3	34.7	34.5	33.5	37.5	39.2	36.6	36.1	40.7	41.4	/28/95	HUMI	41.2 41.1 40.2 39.3 37.2 38.6 37.0
DATE=0	AIR	36.6	DATE=09/28/95	AIR TEMP	36.4	36.0 36.5	36.3 36.4	36.8	37.2 37.4	37.5	36.1	36.0	36.0	36.1	36.3	36.3		36.4 36.4	DATE=09/28/95	AIR	36.2 36.8 37.2 37.6 37.6 38.1
FLAPNO=2567	REL- TIME	7.98	FLAPNO=2569	REL- TIME	-1.00	-0.50	0.00	1.00	7.20 5.00	2.50	3.50	4.00	4.50	5.00	6.00	6.50	9.5	8.9	FLAPN0=2570	REL- TIME	-1.00 -0.75 -0.25 -0.25 -0.00 0.50 1.00
FLAP	ACTL TIME	19:00	- FLAPN	ACTL TIME	9:15	10:00	10:15 10:45	11:15	11:45 12:15	12:45	13:45	14:15	14:45	15:45	16:15	16:45	17:15	17:45 18:15	FLAPN	ACTL TIME	9:00 9:15 9:30 9:45 10:00 11:00
	TARG	19:00		TARG	9:15	9:45 10:00	10:15 10:45	11:15	11:45 12:15	12:45	13:45	14:15	14:45	15:45	16:15	16:45	17:15	17:45 18:15		TARG	9:00 9:15 9:30 9:45 10:00 11:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	GLUC	1.63 2.28 3.52 4.35 4.35 4.35 4.35 4.35 4.35
NCSU=Yes	GLUC	0.57 0.68 0.68 0.64 0.64 0.42 0.43 0.38
MEDVOL=524	ADJ RESIS	27.9 28.7 29.2 29.2 29.2 34.8 34.8 37.2 37.2 37.2 37.3
MEDV	ADJ FLOW	71.00.1.1.00 71.00.00.1.1.00 80.00.00.00 80.00.00 80 80.00 80 80 80 80 80 80 80 80 80 80 80 80 8
GROUP=3 mg HD	VRE- SIST	28.2 29.0 29.4 30.2 37.3 37.6 37.6 37.6 37.6
	LACT	1.10 0.98 0.97 0.97 0.95 1.08 1.03 0.98
DOSETIME=10:00	DEXT	0.817 0.791 0.767 0.774 0.775 0.851 0.851 0.935 0.935 0.936
	LACT	0.384 0.404 0.415 0.411 0.338 0.328 0.275 0.263 0.264 0.242
PHASE=2 FLAPWT=34.97 (continued)	DEXT	1.150 1.170 1.170 1.170 1.170 1.170 1.170 1.170
=2 FLAPWT=3 (continued)	LACT	0.030 0.030 0.021 0.028 0.015 0.017 0.027 0.027 0.019
	MEAN	
NIMAL/SIDE=95-6-7-L	MED	37.76 37.76 37.77 37.75 36.66 36.66 36.66 36.66
L/SIDE	BP MEAN	374 38 38 38 38 38 38 38 38 38 38 38 38 38
ANIMA	ART Medph	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
DATE=09/28/95	HUMI	36.3 37.7 37.7 37.7 37.7 37.7 37.7 37.7
DATE=0	AIR	38.6 38.6 38.8 38.8 37.9 37.5 37.6 37.6 37.5 37.5 37.5 37.5
FLAPN0=2570	REL- TIME	2.50 2.50 3.50 4.50 6.50 6.50 7.50 7.50 8.50
FLAPA	ACTL TIME	11:30 12:00 13:00 13:30 14:30 15:30 16:30 17:30 17:30
	TARG	11:30 12:30 13:30 14:00 14:30 15:30 16:30 16:30 17:30 17:30

	WID:	פרחכ	0.01	0.18	0.37	0.57	0.75	1.10	1.48	1.86	2.24	2.59	2.32	3.21	3.52	3.82	4.09	4.33	4.58	4.83	5.06	5.28	5.49
NCSU=Yes	OLUC	UTIL	0.72	69.0	0.74	0.80	0.75	0.70	0.75	0.77	0.75	0.71	0.65	09.0	0.61	09.0	0.55	0.48	0.50	0.49	0.46	0.44	0.42
727=	ADJ	RESIS	39.0	37.4	34.7	33.6	33.4	34.9	31.1	36.1	31.6	27.1	32.5	30.5	59.6	28.3	59.6	28.5	27.2	30.8	27.4	27.6	27.4
MEDVOL	ADJ	FLOW	0.92	0.91	0.92	0.92	0.93	0.92	0.93	0.91	0.92	0.92	0.92	0.92	0.91	0.92	0.91	0.91	0.92	0.91	0.91	0.0	0.91
GROUP=E tOH	VRE-	SIST	35.6	34.5	31.7	30.7	30.5	31.8	28.4	33.0	28.9	24.8	29.7	27.9	27.0	25.9	27.0	26.0	54.9	28.1	25.0	25.3	25.0
_	LACT	DEXT	0.17	0.38	0.54	0.63	0.74	0.83	0.91	0.91	0.89	0.93	96.0	1.02	0.95	0.94	0.99	1.05	0.93	96.0	96.0	0.95	0.95
TIME=10:30	DEXT	ROSV	0.625	0.641	0.643	0.626	0.624	0.655	0.641	0.624	0.638	0.673	0.698	0.713	0.734	0.739	0.772	0.809	0.793	0.827	0.823	0.819	0.831
22 DOSE1	LACT	ATEV	0.111	0.216	0.300	0.381	0.430	0.453	0.500	0.521	0.507	0.489	0.462	0.465	0.445	0.459	0.415	0.393	0.354	0.357	0.338	0.328	0.320
FLAPWT=44.22	DEXT	ROSA	1.150	1.150	1.180	1.210	1.170	1.170	1.180	1.190	1.190	1.190	1.170	1.150	1.180	1.180	1.180	1.160	1.160	1.190	1.160	1.150	1.140
PHASE=2 FL	LACT	ATEA	0.022	0.021	0.011	0.011	0.024	0.024	0.00	0.008	0.015	0.008	0.008	0.020	0.021	0.015	0.010	0.025	0.012	0.00	0.015	0.015	0.026
	MEAN	FLOW	1.01	9.	1.01	1.01	1.02	1.0	1.02	9.	1.0	1.0	1.0	1.0	1.00	1.0	1.00	1.00	1.0	9.	9.	0.0	1.00
/SIDE=95-15-4-R	MED	TEMP	36.7	36.4	36.4	36.5	36.3	36.3	36.3	36.4	36.3	36.3	36,3	36.3	36.6	36.6	36.6	36.6	36.7	36.6	36.7	36.7	36.7
7	86	MEAN	36	34	35	31	31	32	62	33	న	52	8	82	22	<b>5</b> 8	27	<b>5</b> 8	23	82	52	23	23
5 ANIMAI	ART	MEDPH	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=10/04/95	HUMI	DITY	41.8	41.6	41.1	40.1	40.5	39.7	39.7	39.8	39.9	40.0	39.1	39.4	39.2	38.7	39.4	38.5	38.7	38.8	38.7	38.7	38.3
DATE=	AIR	TEMP	36.3	36.4	36.6	36.7	36.7	36.7	36.7	36.7	36.6	36.6	36.6	36.6	36.9	37.0	37.0	37.0	37.1	37.1	37.1	37.1	37.1
FLAPNO=2571	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	<b>9.</b> 00	6.50	7.00	7.50	8.00
FLAF	ACTL	TIME	9:30	9:42	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	TIME	9:30	9:42	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	0.01 0.20 0.50 0.50 0.50 0.50 0.50 0.50 0.50	CUM GLUC 0.01 0.31 0.54 0.57 0.78 0.97 1.60 1.60 1.82 2.26 2.26 2.51 2.54
NCSU=Yes	GLUC	0.40 0.77 0.78 0.78 0.88 0.81 0.81 0.81 0.64 0.33 0.33	NCSU=Yes
MEDVOL=540	ADJ RESIS	50.0 38.1 37.8 37.9 32.7 32.0 32.0 32.5 32.5 33.6 33.6 42.5 42.5 42.5	ADJ ADJ FLOM RESIS 0.96 52.0 0.97 45.3 0.97 45.3 0.98 45.0 0.98 40.9 0.97 45.3 0.98 40.9 0.97 35.0 0.97 35.0 0.97 35.0 0.97 35.0
MEDVC	ADJ FLOW	40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05 40.1.1.05	ADJ FLOW 0.97 0.98 0.98 0.98 0.98 0.98 0.97 0.97 0.97
=3 mg HD	VRE- SIST	22.0 23.0 23.0 23.0 23.0 23.0 23.0 23.0	GROUP=EtOH (T SIST (T
GROUP=3	LACT	0.052 0.058 0.098 0.098 0.098 0.098 0.098 0.098 0.098 0.098	
DOSETIME=10:15	DEXT ROSV	0.898 0.677 0.683 0.779 0.689 0.683 0.704 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.723 0.743 0.743 0.743	DOSETIME=10:15  LCT DEXT L/ EV ROSV DI 33 0.750 0.83 0 770 0.823 0 770 0.823 0 771 0.885 0 771 0.909 1 782 0.909 0 783 0.909 0 784 0.909 0 785 0.909 0 787 0.893 1
DOSETI	LACT	0.056 0.216 0.317 0.403 0.476 0.476 0.456 0.456 0.456 0.456 0.259 0.259 0.205 0.206	SE DECIDIO CONTRACTOR
WT=36.32	DEXT	1.140 1.140 1.160 1.180 1.180 1.180 1.180 1.180 1.160 1.160 1.160	DEXT ROSA 1.210 0.1.210 0.1.160 0.1.150 0.1.150 0.1.150 0.1.150 0.1.17
=2 FLAPWT	LACT	0.022 0.022 0.024 0.010 0.013 0.011 0.013 0.013 0.013	PHASE=2 FL  NN LACT  NO 0.013  0.022  0.022  0.025  0.025  0.025  0.025  0.025  0.025  0.026  0.027  0.028  0.027  0.028  0.028  0.028  0.028
L PHASE=2	MEAN	0.1.1.000000000000000000000000000000000	AEAN FLOW 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
/SIDE=95-15-4-	MED	72 25 25 25 25 25 25 25 25 25 25 25 25 25	/SIDE=95-19-1 BP MED 50 37.1 54 37.3 44 36.9 41 36.9 41 36.9 40 37.6 44 37.6 37.6 37.6 37.6 37.6 37.7 33 33.7.7 33 33.7.7
/SIDE=9	BP MEAN	444444444444444444444444444444444444444	L/SIDE: BP MEAN 50 54 44 44 44 44 44 44 44 44 44 44 44 44
ANIMAL,	ART MEDPH	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	ANIMA ART 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
04/95	HUMI DITY	41.5 41.5 339.2 37.7 37.7 36.6 36.6 36.7 36.7 37.1 37.1 37.2 37.2 37.2 37.3 37.3 37.3 37.3 37.3	HUMI DITY 40.2 38.6 38.6 38.6 36.6 36.7 36.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8
DATE=10/04/95	AIR TEMP	37.7 37.5 37.5 37.6 37.6 38.0 38.0 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1	AIR HUMI TEMP DITY 37.7 40.2 38.1 38.6 38.1 36.5 38.1 36.5 38.7 36.5 38.5 36.4 38.5 36.8
	REL- Time	-1.00 -0.75 -0.25	FLAPNO=2573 CTL REL- IME TIME 1:15 -1.00 1:30 -0.75 1:45 -0.25 1:45 1.00 1:45 2.00 1:45 2.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00 1:45 3.00
· FLAPNO=2572	ACTL TIME	9, 30 9, 30 9, 30 9, 30 10, 10 10, 10 10, 10 10, 10 10 10 10 10 10 10 10 10 10 10 10 10 1	ACTL TIME 9:15 9:30 9:30 9:45 10:00 10:15 11:45 11:45 11:45 14:45 15:15 15:15
	TARG	9:15 9:30 10:00 10:00 10:15 11:15 12:45 13:45 14:15 15:45 16:15 16:15 17:45 17	1 ARG 9:30 9:30 10:00 11:15 11:15 12:15 13:45 15:45 15:45 15:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

!	CUM	3.07 3.29 3.52 3.74 3.98	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OU CUM	.01 .20 .28	0.52 0.64	15	1.64 1.87 2.08	48	2 K :	ន់ខ	. 25 :	59		CUM	0.01 0.19 0.36
	° 5	พุพพพพ		3 5	000	000	, <del></del> .	· ~	וא או	N N	NNI	1 M I	n m	:	- 6	000
NCSU=Yes -	GLUC UTIL	0.46 0.45 0.45 0.45	NCSU=Yes	GLUC UTIL	0.81	0.55	0.48	0.45 0.44 0.42	0.37	0.28	0.30	0.26	0.29	NCSU=Yes	GLUC UT IL	0.74 0.76 0.68
	ADJ RESIS	33.4 33.1 32.0 32.2 32.4	MEDVOL=494	ADJ RESIS	69.0 49.1	39.3	34.7	37.8 36.8 39.3	39.5	38.9	38.3	38.9	36.8	MEDVOL=528	ADJ RESIS	29.8 31.6 28.9
MEDVOL=502	ADJ FLOW	0.96 0.97 0.96 0.96	MEDV	ADJ FLOW	0.9%	9.0	0.95	0.95	0.94	0.95	0.96	2.0	0.95		ADJ FLOW	1.01 0.98 1.00
GROUP=EtOH	VRE- SIST	32.3 32.0 31.2 31.2	GROUP=3 mg HD	VRE- SIST	65.7 46.8			36.0 35.0 37.4		37.0 36.6	36.5 36.8	37.0	32.0	GROUP=3 mg HD	VRE- SIST	30.3 32.1 29.4
	LACT	0.82 0.87 0.91 0.93		LACT	0.02	0.58	0.91	0.92	0.97	1.21	0.97	1.07	0.87		LACT	0.14 0.34 0.55
DOSETIME=10:15	DEXT	0.811 0.805 0.810 0.775 0.741	DOSETIME=9:58	DEXT	0.597	0.745	0.807	0.876 0.873 0.899	0.920	0.977	0.961	0.983	0.923	DOSETIME=10:26	DEXT	0.703 0.679 0.721
	LACT	0.261 0.269 0.282 0.287 0.297		LACT	0.030	0.193	0.320	0.307 0.297 0.281	0.264	0.238	0.214	0.192	0.193		LACT	0.096 0.200 0.272
FLAPWT=37.19 tinued)	DEXT ROSA	1.100 1.080 1.090 1.050	FLAPWT=40.32	DEXT	1.150	1.10	1.130	1.180	1.160	1.150	1.160	1.160	1.120	FLAPWT=38.13	DEXT	1.180 1.180 1.160
PHASE=2 FLAPWT (continued)	LACT	0.025 0.030 0.028 0.030 0.038		LACT	0.017	0.023	0.026	0.020 0.023 0.022	0.021	0.029	0.024	0.025	0.027	PHASE=2 FLA	LACT	0.028 0.031 0.030
	MEAN	1.00	-L PHASE=2	MEAN	1.01	285	96.5	88.8	1.02	9.5	20.1	888			MEAN	0.99
SIDE=95-19-11-R	MED	37.9 37.9 37.8 37.8 38.1	ANIMAL/SIDE=95-19-11-L	MED	37.4	36.3	36.4	36.5	36.5	36.6 36.6	36.6 36.6	36.6	36.6	SIDE=95-19-13-R	MED	36.2 36.4 36.4
	BP MEAN	322 33	'SIDE=	BP MEAN	65	338 23 34 2	28 23	3 22 23	37	37	34	3 23	3 55	/SIDE=	BP MEAN	30 31 29
ANIMAL/	ART Medph	7.4 7.3 7.3 7.3	AN I MAL	ART MEDPH	7.4	44.4.4	7.4	4.7	7.4	7.4	4.7	4.4.	7.4	ANIMAL/	ART Medph	7.4 7.4 7.4 7.4
/11/95	HUMI	34.8 34.8 34.8 35.1	11/95	HUMI DITY	44.1	42.1	40.8	40.7 40.6 40.1	39.0 38.8	38.5	37.5 37.8	37.7	38.7	12/95	HUMI DITY	56.6 54.3 52.1
DATE=10/11/95	AIR TEMP	38.5 38.9 39.0 38.8	DATE=10/11/95	AIR TEMP	35.2	35.6 35.6 7	35.9	35.9 35.9	36.0	36.0	36.1	3.8.	36.0	DATE=10/12/95	AIR	35.3 35.6 35.8
FLAPNO=2573	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPN0=2574	REL- TIME	-0.97	0.00	1.03	2.53 3.53	3.53	5.03	5.53 6.03	20.7	8.03	FLAPN0=2575	REL- TIME	-0.92 -0.68 -0.43
FLAPÀ	ACTL TIME	16:15 16:45 17:15 17:45	- FLAPNO	ACTL TIME	9:00	9:45	11:30	12:30	13:30	14:30	15:30	17:00	17:50	- FLAPN	ACTL TIME	9:31 9:45 10:00
	TARG	16:15 16:45 17:15 17:45 18:15		TARG	9:00	9:45 10:00 10:30	11:30	12:00 12:30 13:00	13:30	14:30 15:00	15:30 16:00	17:00	17:50 18:00	1 1 3 1 1	TARG	9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

:					
	GLUC	0.54 0.67 1.10 1.46	2.23	2.88 3.03 3.19 3.34	3.52 3.67 3.82 3.98 4.17
NCSU=Yes	GLUC UTIL	0.70 0.70 0.75 0.72	67.0 67.0	0.31 0.30 0.31 0.31	0.35 0.31 0.32 0.38
MEDVOL=528	ADJ RESIS	24.5 27.5 26.4 24.0	26.2 27.9 36.4	32.1 32.3 32.3	31.5 31.5 31.6 31.6
	ADJ FLOW	28.28.6	8655	2.1.02.1.02.1.02.1.02.1.02.1.02.1.02.1.	1.08
GROUP=3 mg HD	VRE- SIST	24.9 28.0 26.9 24.4	26.7 28.4 37.0	32.7 32.2 32.8 32.5	32.4 32.0 32.0 31.1 32.2
	LACT	0.63 0.73 0.85 0.85	0.93	0.95 0.83 0.83	0.77 -0.55 0.94 0.85
DOSETIME=10:26	DEXT	0.715 0.704 0.701 0.714	0.838 0.859 0.878	0.956 0.966 0.976 0.967	0.950 0.979 0.972 0.961 0.974
	LACT	0.329 0.358 0.412 0.435	0.326 0.310 0.283	0.213 0.192 0.196 0.198	0.195 0.195 0.200 0.189 0.185
FLAPWT=38.13 itinued)	DEXT ROSA	1.180 1.150 1.180	1.150	1.160	1.170 1.170 1.160 1.150
	LACT	0.034 0.032 0.020 0.039	0.028 0.027 0.031	0.035 0.031 0.035 0.035	0.025 0.300 0.024 0.029 0.030
·R PHASE=2 (co	MEAN	201.01	86.00	1.00	1.03 1.03 1.05
SIDE=95-19-13-R	MED	36.2 36.1 36.1 35.9	38.2	36.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	36.2 36.2 36.2 36.2
'SIDE=9	BP MEAN	3 5 7 3 8 5	23885	*****	22222
ANIMAL/	ART Medph	4.7.7.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	7.7	, , , , , , , , , , , , , , , , , , ,	4.7.7. 4.4.4. 7.5.
12/95	HUM1 DITY	51.8 51.9 52.1 52.4	51.0	49.3 49.3 48.8 49.0	49.1 49.5 48.3 49.1 49.3
DATE=10/12/95	AIR TEMP	36.1 36.1 36.1 36.0	36.2 36.2 36.2	36.3 36.3 36.3 36.3	36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3
	REL- TIME	-0.18 0.00 0.57 1.07	2.57	5.37 4.57 5.07 5.57	6.07 6.57 7.07 7.57 8.07
· FLAPNO=2575	ACTL TIME	10:15 10:26 11:30 11:30	13:30	15:00 15:30 15:30 16:00	16:30 17:00 17:30 18:30
: : : :	TARG	10:15 10:30 11:30	12:30 13:00 13:30	14:30 15:30 15:30	16:30 17:00 17:30 18:00 18:30

	W D	GLUC	0.01	0.20	0.37	0.53	99.0	1.00	1.32	1.66	2.00	2.31	2.67	2.97	3.29	3.56	3.83	4.05	4.26	4.45
NCSU=Yes -	OLUC	UTIL	0.79	0.78	29.0	0.65	0.58	0.65	9.0	0.68	79.0	0.63	0.72	0.62	0.63	0.54	0.54	0.43	0.43	0.37
	ADJ	RESIS	40.4	36.8	33.7	31.6	30.5	28.9	29.9	31.2	32.3	33.9	33.9	35.5	35.4	36.2	35.2	36.9	34.5	37.3
MEDVOL=511	ADJ	FLOW	96.0	0.1	0.98	0.98	0.98	0.97	26.0	0.99	96.0	0.97	9.	0.98	0.99	0.99	0.99	0.97	1.01	96.0
GROUP=E tOH	VRE-	SIST	39.8	36.3	33.2	31.2	30.0	28.4	59.4	30.7	31.8	33.3	33.3	35.0	34.8	35.6	34.7	36.4	34.0	36.7
	LACT	DEXT	0.17	0.39	0.61	0.74	0.82	0.83	0.89	0.83	0.87	98.0	0.84	0.83	0.79	0.82	0.78	0.83	0.82	0.86
DOSETIME=10:43	DEXT	ROSV	0.718	0.713	0.753	0.762	0.811	0.779	0.794	0.793	0.785	0.822	0.796	0.821	0.824	0.876	0.884	0.929	0.928	0.926
	LACT	ATEV	0.101	0.188	0.246	0.289	0.287	0.330	0.342	0.325	0.348	0.323	0.350	0.317	0.305	0.271	0.262	0.226	0.221	0.223
FLAPWT=32.01	DEXT	ROSA	1.150	1.120	1.110	1.110	1.120	1.130	1.140	1.150	1.150	1.160	1.170	1.150	1.160	1.160	1.170	1.160	1.150	1.130
PHASE=2 FL	LACT	ATEA	0.029	0.029	0.030	0.032	0.035	0.037	0.035	0.029	0.031	0.034	0.035	0.045	0.040	0.039	0.039	0.035	0.038	0.048
•	MEAN	FLOW	0.98	1.02	9.	1.00	1.00	0.99	0.99	1.01	0.98	0.99	1.02	9.	1.01	1.01	1.01	0.99	1.03	0.98
NIMAL/SIDE=95-19-13-1	MED	TEMP	36.1	37.3	37.3	37.6	36.9	36.8	37.7	38.1	37.1	37.6	37.4	37.4	37.2	37.2	37.1	37.6	37.5	38.4
L/SIDE	8	MEAN	36	37	33	31	30	<b>58</b>	82	31	31	33	34	32	32	36	32	36	32	38
ANIMA	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=10/12/95	HUMI	DITY	39.8	38.6	38.4	37.7	37.2	38.6	38.0	37.8	37.4	37.8	37.0	36.1	37.5	36.5	36.6	36.9	40.0	39.4
DATE=1	AIR	TEMP	37.1	37.9	38.2	38.4	38.3	37.8	38.6	39.0	38.2	38.6	38.4	38.5	38.4	38.3	38.2	38.5	35.2	36.1
FLAPN0=2576	REL-	TIME	-0.97	-0.72	-0.47	-0.22	0.0	0.53	1.03	1.53	2.03	2.53	3.03	3.53	4.03	4.53	5.03	5.53	6.03	6.53
- FLAPN	ACTL	TIME	9:45	10:00	10:15	10:30	10:43	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15
	TARG	TIME	9:45	10:00	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

,			•												:		
	CUM	4.70 4.89 5.04		CUM	0.01 0.19 0.34	0.52 0.74 1.15	1.54	2.27	3.15	3.55	3.89	4.02	4.25	4.49		OUN CUM	0.01 0.23 0.37 0.49 0.63
NCSU=Yes	GLUC UTIL	0.50 0.38 0.30	NCSU=Yes	GLUC	1.00 0.72 0.61	0.77 0.81 0.83	0.77	0.72	0.52	0.32	0.34	0.27	0.28	0.20	NCSU=Yes	GLUC UTIL	0.79 0.89 0.51 0.51
	ADJ RESIS	37.1 37.9 37.1		ADJ RESIS	36.9 41.3 44.1	41.7 36.3 35.4	38.7 37.9	42.1	46.8 46.8	9.94	46.6	62.6 55.4	51.4	49.1	MEDVOL=509	ADJ RESIS	50.2 69.0 50.5 42.4 37.5
MEDVOL=511	ADJ FLOW	0.97 0.95 0.97	MEDVOL=515	ADJ FLOW	1.00	0.98	1.00	0.0 0.0 0.0 0.0 0.0	98.0	8 % 8	0.9	8.0	1.07	1.00		ADJ FLOW	0.98 0.97 0.99 0.99
GROUP=EtOH	VRE- SIST	36.5 37.3 36.5	GROUP=EtOH	VRE- SIST	36.6 41.0 43.8	41.4 36.0 35.2	38.4	4.0.4	7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	76.2	46.2	62.1 54.9	51.0	48.8	GROUP=3 mg HD	VRE- SIST	49.2 67.7 49.5 41.6 36.8
	LACT	0.74 0.85 1.03		LACT	0.33 0.60 0.78	0.80 0.88 0.91	0.91	0.97	98.0	1.18	0.95	0.92 25.23	0.98	1.27		LACT	0.09 0.26 0.47 0.61
DOSETIME=10:43	DEXT ROSV	0.898 0.929 0.929	DOSETIME=10:30	DEXT ROSV	0.672 0.800 0.833	0.761 0.743 0.728	0.771	0.784 0.812	0.864	0.967	0.960	0.984	0.971	1.010	DOSETIME=10:15	DEXT ROSV	0.751 0.721 0.931 0.910 0.845
	LACT ATEV	0.236 0.221 0.220		LACT		0.334 0.385 0.410		0.363 0.346		0.227		0.191 0.164	0.166	0.176		LACT	0.057 0.141 0.139 0.175 0.243
FLAPWT=32.01 :inued)	DEXT ROSA	.170	FLAPWT=30.2	DEXT ROSA	140								130		FLAPWT=30.76	DEXT ROSA	160 180 170
	LACT ATEA	0.036 1 0.041 1 0.054 1		LACT	0.020 1 0.024 1 0.023 1	0.024 1 0.025 1 0.025 1					034	038	039 1	049		LACT ATEA	0.022 0.022 0.017 0.016
PHASE=2 (con			PHASE=2												PHASE=2		0.0000
	MEAN	0.99 0.97 0.99	12-R	MEAN FLOW	1.00	6	0-	÷ -	- 0 -		: <u>.</u> .	00	<u>,                                    </u>	-		MEAN	
ANIMAL/SIDE=95-19-13-L	MED	38.8 38.7 38.2	'SIDE=95-19-12-R	MED TEMP	36.8 36.1 35.9	35.9 35.8 36.1	36.3 36.1	35.9	36.1	36.1	38.	36.9	37.2	37.1	IDE=95-19-12-L	MED	37.9 33.6 35.6 37.1 36.8
L/SIDE	BP MEAN	3888	AL/SID	BP MEAN	44	3 % 42	28 28	97;	‡ <b>9</b> ;	3 4	4 9	2 S	5.5	64	/SIDE:	BP MEAN	49 67 50 37
ANIMA	ART MEDPH	7.4 7.4 7.4	AN I WAL	ART MEDPH	7.5	7.4 7.4 7.4	7.4	7.4	4.7.	7.3	7.4	4.7 4.5	7.4	7.4	AN IMAL/S	ART MEDPH	7.3
/12/95	HUMI	35.4 35.1 35.8	DATE=10/18/95	HUMI	50.6 50.4 49.6	48.3 49.0 48.7	47.3	47.3	46.5	47.8	47.0	47.3	43.8	43.4	18/95	HUMI DITY	37.9 25.7 39.4 37.5 36.6
DATE=10/12/95	AIR	35.2 39.7 39.4	DATE=1	AIR TEMP	36.2 36.2 36.5	36.6 36.6 36.7	36.9 36.8	36.6	36.7	36.8	36.9	36.9 37.5	38.0	38.1	DATE=10/18/95	AIR TEMP	37.6 35.5 36.7 37.6 37.4
FLAPN0=2576	REL- TIME	7.03 7.53 8.03	FLAPN0=2577	REL- TIME	-1.00 -0.75 -0.50	-0.27 0.00 0.50	1.00	2.50	3.50	. 4. c	5.5	6.50 5.00	7.00	8.00		REL- TIME	-1.00 -0.75 -0.48 -0.25 0.00
- FLAPN	ACTL TIME	17:45 18:15 18:45	FLAP	ACTL TIME	9:30 9:45 10:00	10:14 10:30 11:00	11:30 12:00	12:30 13:00	14:00	15:00	16:00	16:30 17:00	17:30	18:30	. FLAPNO=2578	ACTL TIME	9:15 9:30 9:46 10:00
1 1 1 1 1 2 † †	TARG	17:45 18:15 18:45	• • • • • •	TARG	9:30 9:45 10:00	10:15 10:30 11:00	11:30 12:00	12:30 13:00	14:00	15:00	16:00	16:30 17:00	17:30	18:30		TARG	9:15 9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	פרחכ	0.93	1.20	1.45	1.68	1.91	2.10	2.29	2.50	5.69	2.85	3.01	3.12	3.23	3.31	3.44	3.56		2
NCSU=Yes	פרחכ	UTIL	09.0	0.54	0.50	0.45	97.0	0.38	0.38	0.41	0.39	0.32	0.31	0.22	0.23	0.16	0.25	0.25	NCSU=Yes	-
MEDVOL=509	ADJ	RESIS	36.2	34.7	32.8	34.2	32.8	31.6	31.6	31.6	31.1	31.3	29.7	30.2	27.5	29.5	26.8	28.4	MEDVOL=494	4
	ADJ	FLOW	76.0	0.95	0.98	26.0	0.98	0.98	0.98	0.98	1.00	0.99	0.98	0.93	0.98	0.88	26.0	0.92	MEDV	4
GROUP=3 mg HD	VRE-	SIST	35.5	34.0	32.2	33.5	32.2	31.0	31.0	31.0	30.5	30.7	29.1	59.6	27.0	28.9	26.3	27.8	GROUP=3 mg HD	1007
GROUF	LACT	DEXT	0.82	0.89	1.02	1.06	0.99	1.12	0.91	0.92	0.89	0.89	0.88	1.03	0.94	1.16	0.85	0.80	GROUP	104
DOSETIME=10:15	DEXT	ROSV	0.847	0.875	0.894	0.914	0.922	0.955	0.963	0.958	0.972	1.000	0.980	1.000	1.010	1.010	1.000	0.993	DOSETIME=10:45	2
	LACT	ATEV	0.281	0.282	0.278	0.273	0.260	0.244	0.201	0.219	0.205	0.170	0.169	0.159	0.149	0.143	0.149	0.152	DOSETI	-
FLAPWT=30.76 itinued)	DEXT	ROSA	1.160	1.160	1.150	1.150	1.160	1.150	1.160	1.170	1.170	1.160	1.140	1.120	1.130	1.100	1.130	1.130	FLAPWT=26.91	, 1
	LACT	ATEA	0.023	0.027	0.018	0.022	0.025	0.025	0.022	0.024	0.028	0.027	0.029	0.035	0.036	0.039	0.038	0.042		104
. PHASE=2 (cor	MEAN	FLOW	0.99	26.0	1.00	0.99	9.	9.	9.	9.	1.02	1.01	1.00	0.95	9.	0.0	0.99	0.94	PHASE=2	MADA
IMAL/SIDE=95-19-12-L	MED	TEMP	37.0	37.2	37.3	37.2	37.2	37.1	36.8	37.2	37.3	37.4	37.4	37.4	37.8	38.3	38.4	38.4	/SIDE=95-21-5-R	2
/SIDE=9	8	MEAN	35	33	32	33	32	31	31	31	31	31	53	82	22	56	56	<b>5</b> 6	/SIDE=9	6
ANIMAL/	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4	ANIMAL,	÷
18/95	HUMI	DITY	36.2	35.1	34.4	35.5	35.8	36.0	35.8	35.6	35.9	36.0	36.0	35.6	35.6	33.8	33.3	34.1	19/95	2
DATE=10/18/95	AIR	TEMP	37.4	37.7	37.8	37.7	37.7	37.6	37.4	37.6	37.8	37.9	37.9	38.0	38.2	38.8	39.0	39.1	DATE=10/19/95	4
	REL-	H.E.	0.50	9.	1.50	2.00	2.50	3.00	3.50	7.00	4.50	5.00	5.50	6.00	6.50	2.00	7.50	8.00	=2579	
FLAPNO=2578	ACTL	71 <u>%</u>	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	FLAPN0=2579	I L
	TARG	TIME	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15		4

	W C C	GLUC	0.01	0.20	0.36	0.52	0.68	1.02	1.39	1.79	2.16	2.54	2.87	3.13	3.40	3.63	3.85	4.05	4.24	4.45	4.68	4.90
NCSU=Yes -	GLUC	UTIL	0.87	0.75	0.64	0.64	29.0	0.68	0.74	0.79	0.74	0.74	99.0	0.53	0.54	0.45	0.43	0.40	0.40	0.42	0.45	0.44
767=	AD	RESIS	45.5	9.05	37.3	34.2	34.5	31.4	31.8	32.7	34.1	38.3	45.2	9.44	42.0	46.1	44.6	44.3	45.4	41.0	38.9	36.8
MEDVOI	ADJ	FLOW	0.97	96.0	0.94	26.0	96.0	9.0	0.94	0.95	0.94	0.97	0.95	0.94	96.0	0.93	0.94	0.95	0.94	0.95	0.95	0.95
.3 mg HD	VRE-	SIST	43.3	38.6	35.5	32.5	32.8	59.9	30.3	31.2	32.5	36.5	40.2	45.4	45.8	43.9	45.4	45.2	40.4	39.0	37.0	35.0
GROUP=3	LACT	DEXT	0.17	0.37	0.58	0.75	0.78	0.92	0.95	0.91	1.01	0.98	0.95	9.0	0.88	0.97	0.98	1.06	1.15	1.09	96.0	0.93
E=10:45	DEXT	ROSV	0.786	0.836	0.830	0.838	0.843	0.836	0.814	0.792	0.801	0.812	0.842	0.881	0.907	0.913	0.913	0.919	0.940	0.903	0.910	0.912
DOSETIM	LACT	ATEV	3.095	).154	7.201	3.249	.273	313	355	369	385	3.365	324	7.284	1.261	0.549	3.242	3.251	797.0	7.264	0.252	0.249
FLAPWT=26.91	DEXT	ROSA	_		_	_	_	_	_		_									_	.110	_
FLAPWI	LACT	ATEA	.031	.032	.033	.037	. 040	.032	.036	.043	. 044	.043	. 042	. 055	. 048	. 049	. 048	. 050	. 090	. 090	, 090.	. 990-
PHASE=2	IEAN	MOT:	٠	٠	_	_	٠	٠	_	_	_	_	_	_	Ö	_	_	_	_	_	0.1	_
21-5-R	AED A	LEMP	6.2	, 2.9	6.3	, 4.9	, 2.9	, 4.9	6.7	. 2.9	6.9	. 8.9	· 8.9	6.9	7.1	7.0	7.1	7.2	7.7	8.3	. 6.78	7.8
IDE=95-		IEAN TI	74 30	171		,	1-1	,	,-,	1-1	1-1	1-1		1		•		•••	•••	•	37 3	
MAL/S		MEDPH MI	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ANI		_																			7.4	
19/95	E E	T10	40.0	38.8	39.0	38.	38.7	38.7	38.5	38.8	38.	38.1	37.4	37.6	37.7	38.0	38.5	37.9	37.3	36.3	35.5	34.0
DATE=10/19/95	AIR	TEMP	37.1	37.2	37.3	37.4	37.4	37.6	37.7	37.7	37.9	37.9	37.9	38.0	38.1	38.1	38.1	38.2	38.6	39.3	39.0	39.0
	REL-	TIME	-1.00	-0.73	-0.50	-0.25	0.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	<b>6.</b> 00	6.50	7.00	7.50
FLAPNO=2579	ACTL	TI WE	9:45	10:00	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	TIME	6:45	10:00	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

			:																	;		
	CUM	5.12		CUM	0.01	0.35	0.63	0.96 5.	1.54	1.81	2.28 2.88	2.45	5.66	7 ×	3.23	3.40	3.55	5.7 00	4.08		GLUC	0.01 0.15 0.26 0.36 0.44 0.65
NCSU=Yes	GLUC	0.45	NCSU=Yes -	GLUC UTIL	0.99	9.0 4.5.	0.65	0.62	0.57	0.54	0.24	0.33	0.43	0.36	0.39	0.34	0.30	0.57	0.33	NCSU=Yes	GLUC	0.45 0.55 0.46 0.39 0.36
MEDVOL=494	ADJ RESIS	35.7		ADJ RESIS	56.2	4.6.4	40.9	38.7	48.6	46.7	40.7	43.7	45.7	42.1	37.9	37.1	37.1	55.9 8.75	35.1	MEDVOL=512	ADJ RESIS	48.1 45.5 44.4 44.6 44.0 37.9 37.9
MEDVC	ADJ FLOW	0.95	MEDVOL=520	ADJ FLOW	9.0	0.0	1.0	 	0.99	5.5	- 6	1.01	1.01	 8 8	.03	8	9:0	9.5	.8		ADJ FLOW	0.98 0.97 0.99 0.98 0.98 0.98
GROUP≃3 mg HD	VRE- SIST	34.0	GROUP=EtOH	VRE- SIST	56.3	46.5	41.0	38.8	48.7	46.8	45.5	43.8	45.8	42.2	38.0	37.2	37.2	36.0 25.8	35.2	GROUP=3 mg HD	VRE- SIST	47.5 44.9 44.0 43.4 37.4 36.9
	LACT	0.94		LACT	0.10	0.49	0.70	0.76	0.97	0.93	0.99	1.19	96.0	1.02	0.87	0.93	1.07	98.0	0.93		LACT	0.09 0.29 0.48 0.65 0.92 0.92
DOSETIME=10:45	DEXT	0.900	DOSETIME=10:28	DEXT ROSV	0.674	0.844	0.823	0.847	0.858	0.875	0.928	0.939	0.942	0.944	0.939	0.953	0.971	0.950	0.949	DOSETIME=10:29	DEXT ROSV	0.908 0.888 0.946 0.978 0.969 0.957
DOSET 1	LACT	0.258		LACT ATEV	0.073	0.183	0.253	0.265	0.315	0.279	0.233	0.233	0.236	0.219	0.205	0.203	0.209	0.203	0.202	DOSET	LACT	0.040 0.096 0.126 0.142 0.168 0.204
FLAPWT=26.91 ontinued)	DEXT	1.100	FLAPWT=29.44	DEXT ROSA	1.160	1.160	1.140	1.150	1.140	1.140	1.130	1.100	1.150	1.120	1.130	1.120	1.120	1.130	1.130	FLAPWT=28.07	DEXT	1.120 1.150 1.160 1.160 1.150
	LACT	0.069	PHASE=2 FL	LACT	0.023	0.028	0.031	0.036	0.042	0.033	0.033	0.042	0.036	0.040	0.038	0.048	0.050	0.049	0.055		LACT	0.020 0.021 0.023 0.023 0.025 0.027
PHASE=2	MEAN	1.00		MEAN	9.8	6,0		 9.0	0.99	1.01	8.6	1.0	1.01	8.8	80	1.00	9.	8.5	.8	R PHASE=2	MEAN	0.98 1.00 1.00 0.99 0.99
ANIMAL/SIDE=95-21-5-R	MED	37.8	SIDE=95-21-5-L	MED	36.8 36.6	36.3	36.9	36.8	36.4	36.7	36.6 36.6	36.6	36.7	36.7	36.7	36.7	37.4	37.5	37.4	IDE=95-22-5-R	MED TEMP	35.2 35.2 35.2 35.2 35.7
/SIDE=9	BP MEAN	34		BP MEAN	26 48	9 %	<b>1</b>	39	, 8 <del>,</del>	47	<i>4</i>	44	94	24 6	38	37	37	36	3 52		BP MEAN	234456
ANIMAL,	ART MEDPH	7.4	. ANIMAL,	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	ANIMAL/S	ART Medph	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
19/95	HUMI	35.2	DATE=10/19/95	HUMI DITY	52.5 53.0	51.0	50.4	50.5	45.3	44.5	45.2	41.8	41.8	41.2	17	42.5	39.4	39.4	38.9	725/95	HUMI DITY	37.2 34.8 33.9 32.9 32.9
DATE=10/19/95	A1R TEMP	38.9		AIR TEMP	36.1	36.2	36.4	36.7	36.5	36.5	26.5 26.5	36.5	36.5	36.5	36.5	36.5	37.2	37.5	37.6	DATE=10/25/95	AIR	25.25 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0
	REL- TIME	8.00	- FLAPN0=2580	REL- Time	-0.95	-0.47	0.0	0.53	1.53	2.03	3.03	3.53	4.03	4.53	2 2	6.03	6.53	7.03	8.03	FLAPNO=2581	REL- TIME	-0.98 -0.73 -0.23 -0.23 0.00 1.02
- FLAPNO=2579	ACTL TIME	18:45	FLAP	ACTL TIME	9:31	10:00	10:28	11:00	12:00	12:30	13:00	14:00	14:30	15:00	16.00	16:30	17:00	17:30	18:30	- FLAPNO	ACTL TIME	9:30 9:45 10:00 10:15 10:29 11:30
1 1 1 1 1 1 1	TARG TIME	18:45	8 8 8 8 4 0 8	TARG	9:30	10:00	10:30	11:00	12:00	12:30	13:00	14:00	14:30	15:00	16.00	16:30	17:00	17:30	18:30		TARG	9:30 9:45 10:00 10:15 11:00 11:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	SLUC	1.07	1.46	1.68	1.84	2.05	2.17	2.33	2.52	2.68	2.86	3.04	3.19
NCSU=Yes	GLUC	0.42	0.34	0.31	0.32	0.36	0.30	0.33	0.38	0.32	0.35	0.37	0.30
MEDVOL=512	ADJ RESIS	36.1 36.5	40.1	43.0	46.1	9.44	45.1	44.8	43.9	7.47	46.2	45.9	41.5
MEDV	ADJ FLOW	1.00	0.97	0.98	0.98	0.99	0.98	0.98	9.	0.0	9.	9.	1.01
=3 mg HD	VRE- SIST	35.6 36.0	39.6	42.4	45.5	44.0	4.4	44.2	43.3	43.6	45.5	45.4	41.0
GROUP=3	LACT	1.04	1.17	1.15	1.07	0.95	1.19	1.08	0.99	-0.88	1.08	0.89	1.20
DOSETIME=10:29	DEXT	0.946	0.969	0.957	0.978	0.962	0.977	0.955	0.955	0.981	0.960	0.939	0.962
_	LACT	0.232	0.222	0.201	0.199	0.196	0.208	0.204	0.208	0.209	0.205	0.189	0.202
FLAPWT=28.07 ontinued)	DEXT	1.140	1.130	1.120	1.130	1.130	1.120	1.110	1.130	1.130	1.120	1.110	1.100
ŭ	LACT	0.031	0.034	0.034	0.037	0.037	0.038	0.037	0.034	0.340	0.035	0.037	0.037
PHASE=2	MEAN	1.01	0.99	36.	0.99	1.00	6.0	1.00	1.02	1.01	1.01	1.02	1.03
NIMAL/SIDE=95-22-5-R	MED TEMP	35.9	36.0	35.9	35.9	35.9	35.7	35.9	35.8	35.9	35.9	35.8	36.0
/SIDE=9	BP MEAN	38 38	39	<b>5</b> 24	45	77	77	77	77	77	46	43	75
ANIMAL	ART MEDPH	7.4	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.3	7.4
/25/95	HUM1 D1TY	33.6	32.2	2.1.5 2.4.5	31.3	31.3	31.2	31.8	32.0	32.0	31.7	30.9	32.0
DATE=10/25/95	AIR	37.1	37.0	36.9 37.0	37.0	37.1	37.0	37.0	37.0	37.0	37.1	37.0	37.2
FLAPNO=2581	REL- TIME	1.52	2.52	3.52	4.02	4.52	5.02	5.52	6.02	6.52	7.02	7.52	8.02
- FLAPNÓ	ACTL TIME	12:00	13:00	13:30 14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
: ! ! !	TARG	12:00	13:00	13:30 14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	CUM	910	0.01	0.11	0.23	0.36	0.48	0.81	1.09	1.37	1.66	1.90	2.04	2.14	2.23	2.34	2.41	2.50	2.57	2.67	2.75	2.85	2.96
NCSU=Yes .	OLUC	UTIL	0.48	0.40	0.48	0.52	0.55	0.62	0.56	0.57	0.58	0.47	0.28	0.20	0.18	0.21	0.15	0.18	0.13	0.21	0.17	0.19	0.23
=505	ADJ	RESIS	60.3	59.9	57.3	54.7	9.65	0.65	48.0	48.5	49.8	54.0	26.6	61.2	58.1	26.2	57.8	56.1	55.2	53.9	52.9	51.9	51.6
MEDVOL	ADJ	FLOW	0.98	0.97	0.98	0.97	0.99	96.0	9.0	0.97	96.0	96.0	0.95	96.0	96.0	0.98	0.97	96.0	0.98	0.98	0.98	0.98	0.9
GROUP=EtOH	VRE-	SIST	58.7	58.3	55.7	53.3	48.3	47.7	46.7	47.2	48.5	52.5	55.1	29.6	26.6	24.7	56.3	54.5	53.7	52.5	51.5	50.5	50.2
	LACT	DEXT	0.08	0.28	0.54	99.0	0.78	0.83	0.95	1.05	1.01	0.93	1.29	1.18	1.13	0.95	1.23	0.99	1.30	0.80	0.98	0.94	0.78
DOSETIME=10:13	DEXT	ROSV	0.900	0.942	0.902	0.867	0.869	0.823	0.853	0.841	0.826	0.892	0.994	1.030	1.030	1.030	1.060	1.040	1.060	1.030	1.040	1.030	1.010
	LACT	ATEV	0.041	0.082	0.162	0.211	0.249	0.305	0.317	0.351	0.344	0.269	0.230	0.159	0.142	0.136	0.129	0.132	0.124	0.121	0.122	0.128	0.128
FLAPWT=32.35	DEXT	ROSA	1.160	1.160	1.160	1.150	1.160	1.160	1.160	1.150	1.140	1.150	1.150	1.140	1.130	1.140	1.140	1.140	1.130	1.140	1.130	1.130	1.130
PHASE=2 FL	LACT	ATEA	0.021	0.021	0.022	0.023	0.023	0.025	0.026	0.027	0.027	0.029	0.028	0.029	0.029	0.031	0.031	0.033	0.033	0.033	0.034	0.034	0.034
	MEAN	FLOW	1.01	1.00	1.01	9.	1.02	0.9	0.99	1.00	6.0	0.0	0.98	0.99	0.99	1.01	9.	0.99	1.01	1.0	1.01	1.01	1.02
/SIDE=95-22-5-1	MED	TEMP	36.1	36.1	36.4	36.5	36.5	36.5	36.6	36.7	36.7	36.7	36.7	36.7	36.8	36.8	36.8	36.8	36.8	36.9	36.8	36.8	36.8
	8	MEAN	29	28	26	53	67	25	94	47	48	25	24	26	26	22	29	24	24	23	25	51	21
5 ANIMA	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=10/25/95	HUMI	DITY	39.5	39.7	38.0	36.8	36.9	37.0	37.1	36.6	36.2	35.4	36.4	36.5	36.8	34.6	36.7	35.0	35.4	34.9	33.9	34.1	33.2
DATE=1	AIR	TEMP	35.4	35.2	35.5	35.6	35.6	35.6	35.8	36.0	36.1	36.0	36.0	36.0	36.8	36.3	36.3	36.4	36.3	36.3	36.3	36.3	36.4
FLAPN0=2582	REL-	TIME	-0.97	-0.72	-0.47	-0.22	0.00	0.53	1.03	1.53	2.03	2.53	3.03	3.53	4.03	4.53	5.03	5.53	6.03	6.53	7.03	7.53	8.03
FLAP	ACTL	TIME	9:15	9:30	9:45	10:00	10:13	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
!	TARG	TIME	9:15	9:30	9:42	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	2019 CUM	0.01	0.36	0.74	1.33	1.65	2.29	2.38	3.10	5.5 5.5	3.78	3.99	4.20	4.41	4.00		X.	2010	0.01		07.0	0.46	0.3	1.03	1.29	1.57	 	2.38	2.55	2.74	3.03
NCSU=Yes	GLUC UTIL	0.87 0.50 0.45	0.46	0.52	9.6	0.62	0.64	0.54	0.51	0.40	0.44	0.41	0.43	0.42	4.0	NCSU=Yes	2119	111	0.96	0.55	9.0	0.40	0.54	0.56	0.52	0.56	0.0	0.49	0.35	0.38	0.34
MEDVOL=504	ADJ RESIS	42.4 31.6 30.2	28.5		8:3	26.8	29.7	34.5	35.0	2,52	34.5	33.5	33.0	33.1	<u>.</u>	MEDVOL=503	AD.I	RESIS	58.2	26.5	24.5	× 00	29.0	29.5	29.3	30.4	31.0	35.1	39.0	37.3	38.4
	ADJ FLOW	0.97	0.98	0.98	0.95	0.97	0.98	. 6.	0.97	2,0	. 6	0.99	0.97	0.97	.,		AD.I	FLOW	0.98	9.6	20.0	0.07	0.96	96.0	0.95	0.95	\$ 6 5 C	0.97	0.95	0.96	0.96
GROUP=3 mg HD	VRE- SIST	41.2 30.7 29.3	27.7	24.8	25.5	26.9 26.9	28.9	33.5	34.0	24.2 2.2	33.5	32.5	32.0	32.2		GROUP=3 mg HD	VRF.	SIST	56.4	55.2	C. I.S.	200	28.1	28.3	28.4	29.4	2.6	34.0	37.8	36.2	36.0 37.2
	LACT	0.01	0.80	0.98	0.9	1.03 0.98	0.98	   	0.97	- c	0.99	1.12	0.98	-6			IACT	DEXT	0.04	0.25	, o	9.0	0.91	0.99	1.02	0.98	- 8	1.0	1.14	0.99	1.1
DOSETIME=10:14	DEXT	0.579 0.828 0.882	0.871	0.831	0.757	0.749	0.739	0.806	0.806	0.855	0.851	0.849	0.834	0.851	0.813	DOSETIME=9:58	DEXT	ROSV	0.632	0.842	3	0.90	0.833	0.815	0.835	0.813	0.800	0.853	0.918	0.902	0.906
	LACT	0.036 0.110 0.186	0.249	0.344	0.410	0.432	0.420	0.362	0.350	0.554	0.313	0.325	0.308	0.309	0.51		IACT	ATEV	0.046	0.103	4 6	0.207	0.309	0.345	0.339	0.351	0.357	0.321	0.272	0.262	0.263
FLAPWT=35.69	DEXT	1.100	1.140	1.140	1.120	1.120	1.120	1.120	1.110	110	110	1.090	1.090	1.100	1.090	FLAPWT=32.54	DEXT	ROSA	1.150	1.140	1.1	130	1.130	1.120	1.120	1.120	120	1.120	1.110	1.13	1.18
	LACT	0.029	0.033	0.042	0.049	0.051	0.054	0.054	0.054	0.055	0.056	0.056	0.056	0.057	0.059	PHASE=2 FL/	IACT	ATEA	0.026	0.028	0.051	720	0.039	0.044	0.048	0.050	0.00	0.053	0.053	0.056	0.058
PHASE=2	MEAN	1.00	1.0	5.5	0.98	8.5	1.0	1.02	1.00	1.00	1.02	1.02	1.00	8.8	70.1	-L PHA	MAH	FLOW	1.01	8:	7.0	2,5	.0	0.99	0.99	8.0	5 5	8	0.98	9.9	
IMAL/SIDE=95-23-4-F	MED	37.1 36.6 36.6	37.1	36.9	36.8	37.3	37.2	37.2 37.2	37.1	37.2	37.4	37.4	37.7	37.6	57.5	NIMAL/SIDE=95-23-4	Ā	TEMP	36.0	36.2	20.4	, 5 4 4 4	36.6	36.6	36.5	36.7	. % . %	36.8	36.8	36.8	36.8 36.8
/SIDE=	BP MEAN	347	28	: K) K	3 ស	5 24 24	81	% r	34	34 4 4 7	3,4	33	32	32	<u>.</u>	IL/SIDE	ă	MEAN	25	52	25	2 8	\$ 2	28	58	626	3 5	34	37	36	34
ANIMAL	ART MEDPH	4.7.7.4.4.4.4	7.4	7.4	7.4	7.7	7.4	4.7	7.4	4.7	7.4	7.4	7.4	7.4	4.	ANIMA	TOA	MEDPH	7.4	7.4	4.4	* 7	7.7	7.4	7.4	4.4	4.7	7:4	7.4	7.4	7.4
56/92	HUMI DITY	37.1 35.7 37.4	32.2	33.0	32.9	32.8	32.3	31.9	31.8	32.7	32.5	32.1	32.9	32.0	32.1	7/26/95	Ä	DITY	38.8	37.5	57.2	26.6	35.6	35.9	35.9	34.8	5. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	34.3	35.4	35.0	34.8 34.4
DATE=10/26/95	AIR	37.0 37.1 32.0	37.8	37.9	38.1	38.2	38.2	38.1 38.2	38.2	38.2	38.4	38.5	38.6	38.6	58.5	DATE=10/26/99	Q I Q	TEMP	35.0	35.5	26.0 26.0	2,4	36.3	36.4	36.4	36.5	26.0	36.6	36.7	36.4	36.7 36.7
	REL- TIME	-0.98 -0.73 -0.48	-0.23	0.52	1.52	2.05	3.02	5.52 4.02	4.52	5.02	6.02	6.52	7.02	7.52	8.02	FLAPN0=2584	<u>п</u>	TIME	-0.97	-0.72	-0.47	7.0	0.53	1.03	1.53	2.03	2.5	3.53	4.03	4.53	5.03
FLAPN0=2583	ACTL TIME	9:15 9:30 9:45	10:00	10:45	11:45	12:15	13:15	13:45	14:45	15:15	16:15	16:45	17:15	17:45	78:15	- FLAPI	ACTI	TIME	9:00	9:15	9:30		10:30	11:00	11:30	12:00	12:50	13:30	14:00	14:30	15:00 15:30
	TARG	9:15 9:30 9:45	10:00	10:45	11:45	12:15 12:45	13:15	13:45	14:45	15:15	16:15	16:45	17:15	17:45	18:15		TABG	TIME	6:00	9:15	9:30	4:45 6:01	10:30	11:00	11:30	12:00	12:30	13:30	14:00	14:30	15:00 15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

:			:		;		
	GLUC	3.26 3.41 3.57 3.70 3.86		OLUC MUD	0.01 0.15 0.28 0.42 0.56 0.56 1.45 1.70 2.35 2.35 3.02 3.29 3.29 3.55	GLUC	0.01 0.18 0.35
NCSU=Yes .	GLUC	0.33 0.31 0.27 0.33	NCSU=Yes	GLUC	0.60 0.55 0.55 0.55 0.66 0.52 0.52 0.37 0.33 0.33 0.26 0.25 0.26 0.25	GLUC	0.76 0.69 0.66
MEDVOL=503	ADJ RESIS	39.1 43.1 39.8 39.6 37.0	MEDVOL=537	ADJ RESIS	0.02 37.1 0.04 37.5 0.03 36.7 0.03 36.7 0.02 35.1 0.02 35.4 0.02 35.4 0.02 35.4 0.03 38.3 0.04 39.4 0.05 39.2 0.05 39.2	ADJ RESIS	35.6 32.2 30.9
MEDVC	ADJ FLOW	1.00 0.97 0.95 0.96 0.97	MEDV	ADJ FLOW	1.02 1.03 1.03 1.03 1.03 1.05 1.05 1.03 1.03	ADJ FLOW	1.00
GROUP=3 mg HD	VRE- SIST	37.9 41.8 38.6 38.4 35.8	GROUP=3 mg HD	VRE- SIST	.17 38.4 .63 38.8 .77 38.0 .77 36.0 .89 38.3 .91 40.6 .96 38.2 .11 40.4 .25 38.2 .11 40.4 .25 38.2 .00 40.8 .00 40.8 .00 40.8 .00 40.8 .00 40.8 .00 40.8 .00 40.8	VRE- SIST	35.3 32.0 30.7
GROUP	LACT	1.01 0.95 1.01 1.05	GROUP	LACT	000000000000000000000000000000000000000	LACT	0.06 0.31 0.51
DOSETIME=9:58	DEXT	0.934 0.943 0.931 0.934 0.914	DOSETIME=10:28	DEXT	.071 0.784 .136 0.900 .181 0.903 .223 0.889 .263 0.849 .287 0.865 .275 0.888 .271 0.887 .271 0.887 .278 0.913 .248 0.913 .248 0.913 .248 0.976 .191 1.010 .170 0.998 .161 1.010 .170 0.998 .161 1.010	DEXT	0.729 0.767 0.781
	LACT	0.237 0.221 0.233 0.246 0.249	DOSETI	LACT	0.071 0.136 0.137 0.233 0.263 0.275 0.275 0.276 0.276 0.279 0.198 0.198 0.197 0.197 0.169	LACT	0.046 0.145 0.213
PHASE=2 FLAPWT=32.54 (continued)	DEXT	1.110 1.110 1.080 1.090	FLAPWT=27.36	DEXT ROSA	23 1.060 26 1.150 29 1.140 30 1.150 32 1.150 35 1.150 37 1.130 40 1.120 44 1.120 45 1.130 46 1.120 46 1.130 47 1.130 47 1.130 48 1.130 49 1.130 49 1.130 51 1.100 57 1.100	DEXT ROSA	1.150 1.160 1.150
=2 FLAPUT= (continued)	LACT	0.060 0.063 0.063 0.063		LACT		LACT	0.022 0.022 0.024
	MEAN	1.03	R PHASE=2	MEAN	0.99 0.99 0.97 0.97 0.97 0.97 0.99 0.97 0.99 0.99	MEAN	1.02
IDE=95-23-4-L	MED	36.8 36.8 36.8 36.8	DE=95-23-5-R	MED TEMP	\$8 35.8 \$9 36.6 \$8 36.5 \$6 36.6 \$6 36.4 \$6 36.6 \$10 36.6 \$11 36.6 \$1	MED	36.2 36.3 36.4
	BP MEAN	38 38 38 38	-	BP MEAN	8	BP MEAN	32 32
ANIMAL/S	ART MEDPH	44444	ANIMAL/S	ART MEDPH	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	ART Medph	7.4 7.4 7.4
/26/95	HUMI DITY	34.5 34.1 33.5 34.5 35.1	01/95	HUM1 DITY	41.5 4 41.15 5 41.17 4 41.7 4 42.1 4 40.1 4	HUMI DITY	39.3 39.0 38.5
DATE=10/26/95	AIR	36.7 36.8 36.8 36.8	DATE=11/01/95	AIR TEMP	36.7 42.1 36.8 41.6 36.8 41.5 36.8 41.7 36.6 41.7 36.6 41.7 36.7 41.7 36.8 42.1 36.9 40.1 36.8 40.1 36.7 40.2 36.7 40.2 36.7 40.2 36.7 40.2 36.8 40.1 36.8 40.2 36.8 40.2	AIR TEMP	36.2 36.5 36.8
FLAPNO=2584	REL- TIME	6.03 6.53 7.03 7.53 8.03		REL- TIME	-0.97 -0.47 -0.22 -0.22 -0.22 -0.22 -0.00 -0.00 -0.00 -0.03	REL- TIME	-0.97 -0.72 -0.47
- FLAPN	ACTL TIME	16:00 16:30 17:00 17:30	FLAPN0=2585	ACT.L TIME	9:30 -0.57 -0.67 -	ACTL TIME	9:15 9:30 9:45
1	TARG	16:00 16:30 17:00 17:30 18:00		TARG	9:30 9:45 10:10 10:13 11:30 11:30 12:00 13:30 14:30 15:30 16:30 17:30 17:30 18:30	TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	OLUC CUM	0.50 0.63 0.98 1.28 1.28 2.34 2.34 2.34 2.34 2.34 3.10 3.10 4.4 4.08 4.08	CUM 6LUC 0.01 0.13 0.25 0.25 0.25 1.26 1.26 1.27 1.27 2.29 2.29 3.10 3.23 3.23
NCSU=Yes -	GLUC UTIL	0.60 0.60 0.66 0.63 0.51 0.52 0.47 0.37 0.38 0.34 0.35 0.35 0.35	0.64 0.73 0.73 0.73 0.73 0.73 0.39 0.39 0.35
MEDVOL=515 N	ADJ RESIS	.99 31.2 .00 29.1 .99 29.4 .99 29.4 .99 33.3 .99 34.4 .99 35.3 .01 37.5 .99 38.5 .99 38.5 .99 38.5 .99 38.5 .99 37.3 .99 38.5 .99 37.3 .99 37.3	RESIS 61.4 61.4 61.4 33.0 33.0 33.0 43.6 6.6 6.6 6.6 6.6 6.6
MEDVO	ADJ FLOW	0000000-00000-0	ADJ 0.95 0.95 0.97 0.97 0.95 0.95 0.95
GROUP=3 mg KD	VRE- SIST	.65 31.0 .82 28.9 .82 27.7 .91 29.1 .96 29.1 .98 33.0 .01 34.2 .00 34.2 .01 37.0 .01 35.0 .01 38.4 .96 38.2 .03 37.4 .96 38.2 .03 37.4 .96 38.2 .03 37.6	VRE- SIST 38.3 36.0 37.2 37.2 37.2 40.6 41.6 41.8 41.8
GROUP	LACT	0000000-0-0	LACT 0.08 0.00 0.00 0.00 0.00 1.00 1.00 1.00
DOSETIME=10:13	DEXT	247 0.808 287 0.815 328 0.782 341 0.808 372 0.784 313 0.844 328 0.871 328 0.871 228 0.920 234 0.930 235 0.946 235 0.936 225 0.932 225 0.932 225 0.932	DEXT ROSV 0.717 0.825 0.826 0.788 0.776 0.
DOSET	LACT	0.247 0.328 0.341 0.372 0.373 0.373 0.378 0.284 0.284 0.284 0.235 0.235 0.235 0.235 0.235 0.235 0.235	LACT ATEV 0.059 0.142 0.228 0.348 0.466 0.466 0.466 0.377 0.376 0.236 0.276 0.276 0.255
PHASE=2 FLAPWT=33.94 (continued)	DEXT	24 1.150 28 1.150 29 1.150 31 1.140 32 1.150 32 1.140 32 1.150 34 1.150 37 1.140 38 1.140 39 1.150 40 1.150 41 1.10 42 1.110	DEXT ROSA 1.070 1.100 1.110 1.120 1.120 1.120 1.110 1.100 1.100 1.100 1.100
=2 FLAPWT=3 (continued)	LACT ATEA	00000000000000000	LACT ATEA 0.032 0.033 0.033 0.037 0.042 0.051 0.051 0.063 0.063 0.063
	MEAN	PHASE=2	FLOW 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AL/SIDE=95-23-5-L	MED TEMP	31 36.6 29 36.6 29 36.7 29 36.7 29 36.7 33 36.9 34 37.1 34 37.2 35 37.2 38 37.2 38 37.2 37 37.2 38 37.2 37 37.2	MED 36.5 36.5 36.5 36.5 36.5 36.5 36.5 36.5
/SIDE=	BP MEAN	31 29 29 29 29 33 34 34 35 37 37 37 37 37	MEAN MEAN 233 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
ANIMAL	ART Medph	7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	MEDPH HEDPH 7.4 4 7.7 7.4 4 7.7 7.4 4 7.7 7.4 4 7.7 7.4 4 7.7 7.4 7.7 7.7
01/95	HUMI DITY	38.5 38.5 38.1 38.1 38.1 38.2 36.5 36.5 37.2 37.2 37.2 37.2 37.2 37.4 37.6	HUMI 41.1 41.1 40.2 40.7 40.7 40.0 40.0 40.0 39.1 36.1 36.1 36.9 36.9 37.6 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1
DATE=11/01/95	AIR	37.0 38.5 37.1 38.0 37.1 38.0 37.3 38.1 37.4 38.0 37.5 38.2 37.8 36.5 37.8 36.7 37.8 36.7 37.8 37.2 37.8 37.2 37.8 37.2 37.8 37.2 37.8 37.2 37.8 37.2 37.5 37.4 37.5 37.5	AIR 1EMP 37.6 38.1 38.2 37.7 37.7 37.9 38.2 38.2 38.5 38.5 38.5 38.5 38.5 38.5 39.0
	REL- TIME	NOMMMMMMMMMMMM	7 11 ME
FLAPNÖ=2586	ACTL TIME	10:00 -0.2 10:45 0.5 11:45 1.0 11:45 1.5 12:15 2.0 12:45 2.5 13:45 3.0 14:45 4.5 15:45 5.0 16:15 6.0 16:45 6.5 17:45 7.5 17:45 7.5 18:15 8.0	ACTL 1 IME 9:16 9:30 9:45 9:57 11:15 11:45 14:45 14:45 14:45 14:45 16:45
	TARG	10:00 10:15 11:15 11:15 11:45 12:15 13:15 14:45 14:45 16:15 16:15 17:45 17:45 17:45	TARG 11 ME 9:15 9:30 9:45 10:05 10:15 11:45 11:45 12:45 13:45 14:15 15:45 16:15 16:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

•			•												;		
1 1 2 6 6 9 3	CUM	3.86 4.02 4.18		CUM	0.01 0.18 0.34	0.50	1.42	2.22 2.59	2.91 3.21	3.58	3.71	3.97	4.09 4.19	4.30	1	SLUC	0.01 0.23 0.43 0.64 0.80
NCSU=Yes -	GLUG	0.30 0.33 0.31	NCSU=Yes -	GLUC UTIL	0.72 0.68 0.64	0.65	0.78	0.76 0.75	0.63 0.61	0.46	0.25	0.29	0.23	0.20	NCSU=Yes	GLUC UTIL	0.66 0.90 0.80 0.82 0.76
MEDVOL=493	ADJ RESIS	39.0 39.1 35.8	MEDVOL=529	ADJ RESIS	42.2 30.6 29.0	28.7 28.7	26.0	30.7 33.8	34.0 37.3	40.6	38.1	40.0	41.6	41.2	MEDVOL=478	ADJ RESIS	40.2 29.8 28.4 25.7 25.9
MEDVO	ADJ FLOW	0.95 0.95 0.95	MEDVO	ADJ FLOW	1.02	1.02	9.7	1.01	1.00	1.01	1.08	1.02	1.01	1.02		ADJ FLOW	0.92 0.92 0.93 0.93
GROUP=3 mg HD	VRE- SIST	37.0 37.2 34.0	GROUP=3 mg HD	VRE- SIST	43.0 31.2 29.6	32.0 29.3	26.5	31.3 34.5	34.7 38.0	41.4	38.9	8.04	45.4 43.0	42.0	GROUP=3 mg HD	VRE- SIST	37.0 27.5 26.1 23.6 23.9
	LACT	1.05 0.95 1.00		LACT	0.08	0.89	1.03	1.00	1.08	1.08	1.33	0.91	8 8	1.11		LACT	0.04 0.30 0.56 0.71 0.80
DOSETIME=10:12	DEXT ROSV	0.912 0.907 0.908	DOSETIME=9:57	DEXT ROSV	0.782 0.799 0.824	0.815 0.810	0.755	0.757	0.807 0.834	0.894	0.983	0.971	1.000	0.991	DOSETIME=10:28	DEXT	0.796 0.710 0.728 0.713
DOSETIM	LACT	0.248 0.248 0.247		LACT	0.054 0.148 0.214	0.279 0.316 0.367	0.414	0.418 0.367	0.384	0.293	0.205	0.180	0.178 0.163	0.168		LACT	0.045 0.164 0.257 0.320 0.338
/T=33.19 led)	DEXT ROSA	1.080 1.090 1.080	FLAPWT=29.15	DEXT	1.130 1.130 1.140	1.130	1.140	1.130	1.120 1.130	1.120	1.10	 	91.1	1.090	FLAPWT=29.39	DEXT	1.120 1.140 1.120 1.120
PHASE=2 FLAPWT=33.19 (continued)	LACT	0.071 0.074 0.075		LACT	0.026 0.028 0.029	0.030	0.036	0.044	0.046	0.050	0.049	0.053	0.054	0.058		LACT	0.033 0.036 0.036 0.037 0.040
	MEAN	1.00	L PHASE=2	MEAN	1.00	2.88	1.01	0.99 1.02	0.98 1.00	0.0	2.0	5.5	.03	88	R PHASE=2	MEAN	1.02
DE=95-23-7-R	MED	37.7 38.0 38.0	ANIMAL/SIDE=95-23-7-L	MED	37.2 35.9 36.5	36.6 36.6 36.6	36.6	36.6 36.6	36.6 36.7	36.6 36.6	36.6	36.6	36.7 36.8	36.8 36.8	IDE=95-26-10-R	MED	35.3 35.4 35.6 35.8
	BP MEAN	37	/SIDE=	BP MEAN	43 29	2 62 82	383	33.3	34 38	<b>41</b>	4:	. 7.	7 5	70	/SIDE=9	BP MEAN	37 28 24 24 24
ANIMAL/S	ART Medph	7.4 7.4 7.5	ANIMAL	ART MEDPH	7.4	4.7.	7.4	7.4	7.4	7.4	7.4	7.7	7.4	7.4	ANIMAL/S	ART Medph	7.7.7.7 7.4.4.4
102/95	HUM1 DITY	35.5 34.7 34.6	DATE=11/02/95	HUMI DITY	46.6 46.0 45.6	44.1 44.0	44.0	44.3 43.8	44.2	39.3	40.3	39.4	37.2 38.3	38.5	56/60/	HUMI	29.0 28.9 28.0 28.9 28.0
DATE=11/02/95	AIR	39.1 39.1 39.3	DATE=1'	AIR TEMP	36.6 35.9 36.3	36.5	36.0	36.4 36.5	36.4 36.4	36.4 36.4	36.4	36.4	36.5 36.6	36.7	DATE=11/09/95	AIR TEMP	37.1 37.3 37.1 37.4 37.2
	REL- TIME	7.05 7.55 8.05	FLAPNO=2588	REL- TIME	-0.95 -0.70 -0.45	0.00	1.05	2.05	3.05	4,05	5.05 7.05	6.05	6.55 7.05	7.55 8.05		REL- TIME	-0.97 -0.72 -0.47 -0.22 0.00
FLAPNO=2587	ACTL TIME	17:15 17:45 18:15	- FLAPN	ACTL TIME	9:00 9:15 9:30	9:45 9:57 10:30	11:00	12:00 12:30	13:00 13:30	14:00	15:00	16:00	16:30 17:00	17:30 18:00	· FLAPNO=2591	ACTL TIME	9:30 9:45 10:00 10:15 10:28
1 1 1 1 1 2 1 1	TARG	17:15 17:45 18:15	1 1 1 1 1 1	TARG	9:00 9:15 9:30	9:45 10:00				14:00	15:00	16:00	16:30 17:00	17:30		TARG	9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	GLUC CUM	1.22	1.97 2.39	2.85	3.19	3.54	7.00	4.24	4.45	4.60	4.77	4. V.	 	;		SUS	OLUC	0.01	0.21	0.38	0.54	0.71	1.04	 		2.6	2.98	3.32	3.51	3.77	7.04	4.30	4.57	. 85 . 5	٠	07.0
NCSU=Yes	GLUC UTIL	0.78	0.80	0.87	0.73	0.7 7.2	0.0	0.43	0.37	0.35	0.35	0.30	0.55	7	NCSU=Yes	OLUC	UTIL	1.01	0.79	0.71	0.61	69.0	0.69	2.6	3 6		0.78	69.0	0.36	0.53	0.55	0.51	0.55	0.57	0.40 0.40	U.40
MEDVOL=478	ADJ RESIS	28.5	26.1 24.6	25.7	30.7	42.8	2 K	80.1	83.6	81.6	84.9	8 6	~ c	;		AD	RESIS	53.1	43.9	45.0	45.5	40.1	37.9	36.U	7.7	. 07	7.07	46.3	51.3	55.3	57.7	62.1	64.5	62.6	φ. 4. Σ. α	7.00
	ADJ FLOW	0.92	0.92	0.93	0.91	0.93	26.0	0.91	0.92	0.94	0.93	3.5		:	MEDVOL=523	ADJ	FLOW	1.00	9.	0.98	0.99	1.00	0.1	50.	3 5	- 6 - 6	0.98	0.99	1.01	1.01	0.99	0.98	0.99	7.02	3.5	<u>-</u>
GROUP=3 mg HD	VRE- SIST	23.0	24.0 22.7	23.6	28.3	39.4	2, 8,	73.7	77.0	75.1	78.5	٠ <u>٠</u>	1 6	2	GROUP=EtOH	VRE-	SIST	53.5	44.2	42.4	45.9	40.4	38.2	36.5	20.75	20.0	71.0	46.7	51.7	55.7	58.2	62.6	65.0	63.1	5.5	9.
	LACT	0.93	0.97	0.98	0.94	9.1	5 6	1.03	1.11	1.13	1.16		2.	<u>:</u>		LACT	DEXT	0.02	0.21	0.43	99.0	0.72	0.82	2.0			100	1.01	1.63	0.99	0.88	0.95	0.0	1.00	7.02	3.
DOSETIME=10:28	DEXT	0.740	0.708	0.691	0.747	0.759	0.050	0.896	0.931	0.943	0.952	0.928	75,0	6.0	DOSET IME=10:15	DEXT	ROSV	0.613	0.730	0.762	0.790	0.778	0.772	0.732	0.710	604	0.709	0.758	0.763	0.739	0.761	0.801	0.820	0.893	0.889	U. 80U
	LACT	0.400	0.428	0.465	0.396	0.418	0.524	0.277	0.258	0.245	0.251	0.227	0.220	6.0		LACT	ATEV	0.042	0.116	0.190	0.243	0.293	0.331	0.401	70.0	0.450	0.455	0.408	0.344	0.310	0.299	0.302	0.299	0.290	0.284	707.0
FLAPWT=29.39 itinued)	DEXT	1.120	92.1	1.13	1.110	1.10	130	1.110	1.110	1.110	1.120	2:	2 5	0.0.	FLAPWT=30.99	DEXT	ROSA	1.140	1.140	1.140	1.110	1.140	1.130	1.150	2 6	100	1.120	1.120	0.950	1.010	1.050	1.070	1.10	1.150	1.150	<u></u>
PHASE=2 FLAPWT= (continued)	LACT ATEA	0.045	0.047	0.053	0.053	0.056	0.020	0.056	0.059	0.057	0.056	0.020	7,00		PHASE=2 FL	LACT	ATEA	0.030	0.029	0.029	0.032	0.033	0.036	0.039	5 6		0.043	0.044	0.039	0.042	0.044	0.046	0.039	0.032	0.039	J. U. 4
	MEAN	0.3	1.00	1.02	0.99	7.02	3 5	0.9	1.00	1.03	1.01	5.0 5.0	3.6	9		MEAN	FLOW	0.99	1.00	0.97	0.98	0.99	9.	7.02	3 5	- 0	0.98	0.9	1.01	1.01	0.98	0.98	0.0	7.05	8.5	5.
1AL/SIDE=95-26-10-R	MED	35.8	35.6 36.3	36.3	36.1	35.2	 	35.5	35.9	35.8	35.8	ر د ا	٠. د. د	· ·	IMAL/SIDE=95-26-10-L	æ	TEMP	34.3	35.0	35.1	35.2	35.3	35.3	55.5	2.5	35.5	35.3	35.4	35.4	35.4	35.4	35.4	35.6	35.6	55.6	0.00
/SIDE=9	BP	283	% K	25	<b>8</b> 8	9 5	8 8	3 12	12	22	٤ ا	æ 6	? i	2	IL/SIDE	æ	MEAN	53	7,7	77	45	07	38	37	Č 6	9 5	07	9	25	29	22	61	\$:	\$ ;	3 :	8
ANIMAL	ART Medph	7.4	7.7	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.4	4.1	<b>4</b> .	•	ANIM	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.5	7.4	. t	* 7	7.5	7.4	7.4	7.4	7.4	7.4	7.4	4.7	4.1	
26/60	HUMI	28.2	27.4	27.0	27.5	27.7	27.5	27.4	27.4	27.9	27.3	67.7	7.7		/09/95	HUMI	DITY	32.0	31.6	31.3	30.4	31.1	59.6	29.8	0.6	20.0	200	29.0	29.7	29.3	29.3	59.4	28.8	26.5	29.5	67.5
DATE=11/09/95	AIR	37.3	37.1	37.3	37.6	36.7	20.0 47.0	37.0	37.5	37.4	37.4	57.6	5.5	9.	DATE=11/09/9	AIR	TEMP	35.7	36.7	36.8	36.9	37.1	37.0	37.0	27.0	47.	37.0	37.1	37.1	37.1	37.1	37.2	37.2	37.3	37.4	4.70
	REL- TIME	1.03	2.03	2.53	3.03	3.53	4.03 53	5.03	5.53	6.03	6.53	7.03	5.5	6	FLAPN0=2592	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.48	8:		9.5	00	3.50	4.00	4.50	2.00	5.50	<b>6.</b> 00	6.50	7.00	J. 20
FLAPNO=2591	ACTL TIME	11:00	12:00	13:00	13:30	14:00	14:50	15:30	16:00	16:30	17:00	17:30	18:00	00:00	·- FLAPN	ACTL	TIME	9:15	9:30	9:45	10:00	10:15	10:44	11:15	C4:	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45
	TARG TIME	11:30	12:00	13:00	13:30	14:00	15.00	15:30	16:00	16:30	17:00	17:30	18:00	00:01		TARG	T1ME	9:15	9:30	9:45	10:00	10:15	10:45	11:15	C+:	12.75	14.15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

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	CUM	5.51		CUM	0.01	0.46 0.56	0.84 1.18	1.54	2.31	3.11	3.89	4.24 5.4	4.85	5.45	5.73	1	GLUC	0.01 0.23 0.48 0.61 0.88
NCSU=Yes	GLUC	0.45	NCSU=Yes	GLUC	1.46 0.74 0.48	0.57	0.54	 	0.79 0.86	0.74	0.73	2.7	0.61	0.56	0.55	NCSU=Yes -	GLUC UTIL	1.28 0.89 0.50 0.53 0.54 0.54
	ADJ RESIS	65.5	MEDVOL=471	ADJ RESIS	77.1 66.1 66.9	55.4 51.8	44.1 41.4	39.7 39.5	40.2 43.4	69.0	54.5	57.3 57.3	58.1	57.3	58.2 57.9		ADJ RESIS	63.3 44.8 41.8 37.5 33.5
MEDVOL=523	ADJ FLOW	1.01		ADJ FLOW	0.91	0.92	0.91	0.91	0.92	0.90	0.30	9.0	0.91	. 6.9	0.89	MEDVOL=487	ADJ FLOW	0.95 0.94 0.93 0.93 0.92
GROUP=EtOH	VRE- SIST	0.99	GROUP=3 mg HD	VRE- SIST	70.09 60.09 7.09	50.2 47.0	40.0 37.6	36.0 35.8	36.5 39.4	7.77	44.5	52.0	52.7	52.0	52.8 52.5	GROUP=E tOH	VRE- SIST	59.4 46.8 42.0 39.2 35.2 34.5
	LACT	1.03		LACT	0.00	0.57	0.84 0.86	0.92	0.93	1.06	0.93	0.92	0.94	0.76 0.87	0.86 0.86		LACT	0.01 0.02 0.18 0.37 0.57 0.74
DOSETIME=10:15	DEXT	0.848	DOSETIME=10:29	DEXT	0.529	0.908	0.926 0.863	0.846	0.807	0.821	0.814	0.852		0.931	0.938	DOSETIME=10:15	DEXT	0.525 0.725 0.885 0.911 0.868 0.902 0.863
	LACT	0.290		LACT	0.023	0.157	0.212	0.298	0.327	0.354	0.312	0.299	0.261	0.227	0.227		LACT	0.025 0.030 0.062 0.113 0.171 0.219
FLAPWT=30.99 :inued)	DEXT	1.080	FLAPWT=24.75	DEXT	1.130	1.140	1.150	1.140	1.130	1.130	1.120	1.150	1.150	1.160	1.170	FLAPWT=29.55	DEXT	1.150 1.160 1.160 1.130 1.170
PHASE=2 FLAPWT (continued)	LACT	0.051		LACT	0.022	0.024	0.023	0.027	0.027	0.028	0.027	0.026	0.027	0.028	0.027	PHASE=2 FL	LACT	0.021 0.020 0.022 0.022 0.022 0.022
	MEAN	1.00	R PHASE=2	MEAN	9.1.0	1.02	0.99	9:1.	1.02	0.00	0.99	0.98	25.	2.6	0.99		MEAN	0.500.000.0000.000000000000000000000000
ANIMAL/SIDE=95-26-10-L	MED TEMP	35.6	DE=95-108-4-R	MED	34.0 35.1	35.1 35.8	35.6 35.7	35.7 35.7	35.7	35.7	35.7	35.9	38	35.9	35.9 35.9	SIDE=95-108-4-L	MED TEMP	33.1 34.9 35.1 35.2 35.2
L/SIDE=	BP MEAN	99		BP MEAN	5 6 2	51	40 37	3 28	39	4:	<b>4</b> 6	<u>r</u> :	K IS I	22 22	25		BP MEAN	47 47 39 34 31 31
ANIMA	ART MEDPH	7.5	ANIMAL/S	ART Medph	7.4	7.4	7.4	7.4 7.4	7.4	7.4	4.7.	7.4	7.4	7.5 7.4	7.4	ANIMAL/	ART MEDPH	444444
56/60/	HUMI DITY	28.5	15/95	HUMI	28.7 30.7 31.1	31.0	30.1 30.8	30.1 29.4	30.0 29.8	59.6	29.9	29.4	29.0	28.9 28.8	28.7 28.2	/15/95	HUMI	29.5 29.7 29.0 28.6 28.6 27.8
DATE=11/09/95	A1R TEMP	37.4	DATE=11/15/95	AIR	36.1 36.4 36.6	36.7	37.3 37.3	37.4 37.4	37.4	37.4	37.4	37.5	37.6	37.6 37.6	37.7 37.7	DATE=11/15/95	AIR	33.7 36.6 36.6 36.8
FLAPNO=2592	REL- TIME	8.00	FLAPNO=2593 [	REL- TIME	-0.98	0.03	0.52 1.02	1.52	2.52	3.52	4.52	5.02	6.02	6.52 7.02	7.52 8.02	FLAPN0=2594	REL- TIME	-1.00 -0.35 -0.25 -0.00 -0.00 -1.00
FLAPÑ	ACTL TIME	18:15	- FLAPNO	ACTL TIME	9:30	10:15	11:00	12:00 12:30	13:00	14:00	15:00:00	15:30	16:30	17:00 17:30	18:00 18:30	FLAPI	ACTL TIME	9:15 9:30 9:45 10:00 10:15 11:15
	TARG	18:15		TARG	9:30	10:15	11:00	12:00 12:30	13:30	14:00	15:00	15:30	16:30	17:00 17:30	18:00 18:30	1 1 1 1 1 1	TARG TIME	9:15 9:30 9:45 10:00 10:15 10:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	1.48 2.26 2.26 2.26 2.26 3.26 3.35 3.35 4.00	CUM GLUC 0.01	0.50 0.34 0.57 0.57 1.53 2.39 2.39 2.39 4.40 4.40 4.40 4.40
	J			
NCSU=Yes	GLUC UTIL	0.59 0.61 0.54 0.40 0.41 0.43 0.37 0.37 0.37 0.37 0.38	GLUC UTIL 0.98	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
	ADJ RESIS	10 C F C 10 50 10 C = 10 10 10 10 10	ADJ RESIS 91.1	67.4 67.4
MEDVOL=487	ADJ FLOW	0.95 0.94 0.95 0.93 0.93 0.94 0.94 0.94	ADJ FLOW	0.92 0.92 0.92 0.92 0.92 0.92 0.93 0.93
GROUP=EtOH	VRE- SIST	71 30.5 77 31.6 77 31.6 77 31.6 75 35.0 76 35.0 76 35.2 76 35.0 76 35.0 76 35.0 76 35.0 76 35.0 76 35.0 76 35.0 76 35.0	VRE- SIST 84.3	622 825 826 836 837 837 837 837 837 837 837 837
	LACT	**************************************	LACT DEXT	0.23 0.23 0.60 0.60 0.85 0.85 0.85 0.92 0.92 0.93 0.93
DOSETIME=10:15	DEXT ROSV	283 0.862 0.868 0.868 0.868 0.868 0.868 0.868 0.873 0.973 0.954 1.100 0.954 1.100 0.954 1.100 0.957 0.987 0.987 0.987 0.987 0.997 0.	DEXT ROSV 0.676	0.773 0.836 0.908 0.915 0.915 0.916 0.910 0.862 0.862 0.862 0.862 0.862 0.862 0.862 0.862 0.862 0.878 0.878
	LACT		LACT ATEV 0.024	0.043 0.129 0.127 0.210 0.274 0.255 0.275 0.276 0.285 0.276 0.266 0.266
FLAPWT=29.55 :inued)	DEXT	1.150 0.1.170 0.1.170 0.1.170 0.1.160 0.1.160 0.1.170 0.1.170 0.1.170 0.1.170 0.1.170 0.1.170 0.1.170 0.1.180	DEXT ROSA	1.140 1.130 1.140 1.140 1.140 1.140 1.150 1.160
PHASE=2 FLAPWT (continued)	LACT	2 0.023 8 0.023 11 0.022 10 0.022 10 0.023 11 0.023 11 0.023 11 0.023 10 0.022 10 0.022 10 0.022 10 0.022	LACT ATEA 0.025	0.024 0.024 0.025 0.027 0.027 0.027 0.017 0.017 0.015 0.016 0.016 0.017 0.010
	MEAN	000000000000	MEAN FLOW	0.99 0.98 0.98 0.98 0.98 0.98 0.98 0.98
SIDE=95-108-4-L	MED	33 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 1.1 35.3 35.4 1.1 35.3 35.3 35.3 35.3 35.3 35.3 35.3	MED TEMP 33.3	355.25 35
L/SIDE	BP MEAN		MEAN 83	\$250 A A A A A A A A A A A A A A A A A A A
ANIMAL/	ART MEDPH		Σ	*****************
/15/95	HUMI	27.7 26.8 27.3 27.3 26.9 26.9 26.9 26.9 26.9 26.9 26.8 26.8 26.8 26.8 26.8 26.8 26.8 26.8	HUMI DITY	29.5 29.1 29.1 29.1 29.2 29.2 29.2 29.3 29.3 29.3 29.3 29.3
DATE=11/15/95	AIR TEMP	36.8 27.7 36.8 26.8 36.9 27.3 36.9 26.5 36.9 26.5 36.9 27.3 37.0 26.7 37.0 26.9 37.0 26.9 37.0 26.8 37.0 2	AIR TEMP 35.3	36.3 36.5 36.6 36.6 36.9 36.9 36.9 37.1 37.1 37.1 37.1 37.1 37.1 37.1
FLAPNO=2594	REL- TIME	:45 1.50 :45 2.50 :15 2.00 :45 2.50 :45 4.50 :45 4.50 :45 5.50 :45 6.50 :45 6.50 :45 7.00 :45 7.00 :45 8.00	REL- TIME	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
FLAP	ACTL TIME	11:45 12:15 12:45 13:15 13:15 14:45 15:15 16:15 16:15 17:15 17:15 18:15	ACTL TIME 9:30	9:45 10:00 10:15 10:00 11:30 12:30 13:30 14:30 15:30 16:30 16:30 17:30 17:30 18:30
	TARG	11:45 12:15 13:15 13:15 14:15 15:15 15:15 16:15 17:15 18:15	TARG TIME 9:30	75.50 11:30 11:30 11:30 12:30 13:30 13:30 14:30 14:30 15:30 15:30 16:30 16:30 17:30 17:30 18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	OLUC CUM	0.01	0.18	0.35	0.48	0.63	06.0	1.15	57.	25.	20.0	2.03	5.55 7, 5	6.0	2.94	3.19	3.48	3.79	4.08	4.37	4.65	4.91	4.91			CUM	פרחכ	0.01	0.26	0.46	0.64	0.83	1.23	1.61	1 07	2,35	77.	9	2.40	3.68	3.94	4.19	4.41
NCSU=Yes	GLUC	1.05	0.68	69.0	0.53	0.57	0.55	67.0	2.5	140	5.0	7 7	7.0	5.0	85.0	0.50	0.59	0.62	0.59	0.57	0.56	0.52		NCSU=Yes -		פרחכ	UTIL	98.0	1.00	0.78	0.74	0.75	0.81	0.73	K	0.76	0.78	0.70	0.61	0.57	0.51	0.51	0.44
MEDVOL=525	ADJ RESIS	-		52.9																				MEDVOL=513		ADJ														46.2			
	ADJ	1.01	1.00	1.00	1.0	1.02	1.00	1.00	1.00	100	5				70.	5.	5	1.02	1.01	1.00	0.99	0.97	0.51			AD.	2	1.02	1.00	9:	1.00	0.99	0.99	0.99	0.98	0.99	0.98	0.98	0.98	0.97	1.00	0.98	0.99
GROUP=No Topical	VRE- SIST	106.5	7.07	53.5	45.0	40.6	38.6	37.4	38.4	38.2	7 07	7.07	40.4	, , ,	. t	7.5	) (1)	43.8	45.0	46.7	48.0	49.2	9.07	GROUP=No Topical		VRE-	SIST	0.99	66.3	58.1	48.5	35.0	33.0	32.8	34.3	34.8	38.4	41.4	41.4	45.7	45.3	46.5	8-95
	LACT	0.03	0.15	0.30	0.54	0.61	0.72	0.89	0.91	0.86	78.0	8	8 8	9 6	2.0	- 0	6,0	9.6	0.93	0.93	0.94	0.87		GROUP		LACT	DEXI	0.11	0.37	0.61	0.74	0.84	0.85	0.88	0.91	0.94	0.83	0.87	0.0	0.89	0.84	0.83	1.00
DOSETIME=10:15	DEXT	0.645	0.845	0.831	0.863	0.884	0.906	0.936	0.887	0.880	0.875		0 807	200	20.0	0.00	0.07	0.870	0.882	0.879	0.873	0.883		DOSETIME=10:15	!	DEXT	KUSV	0.778	0.757	0.842	0.866	0.871	0.876	0.902	0.903	0.888	0.886	0.916	0.953	0.956	0.997	1.000	1.020
DOSETI	LACT ATEV	0.038	0.073	0.126	0.166	0.196	0.227	0.246	0.267	0.281	0.281	0.289	200	736	200	20.0	200	0.289	0.28/	0.281	0.278	0.251	0.810	DOSETIM		LACT	A EV	0.054	0.164	0.204	0.232	0.266	0.288	0.272	0.284	0.297	0.272	0.259	0.233	0.220	0.184	0.189	0.191
FLAPWT=29.3	DEXT	1.160	1.180	1.170	1.120	1.160	1.180	1.180	1.150	1.180	1.180	1.200	1.200	1 180	125	140		2:	2.1	1.160	1.150	1.150	0.304	FLAPWT=23.21	1	DEXI	KOSA	1.100	1.140	1.140	1.150	1.160	1.19	1.190	1.190	1.180	1.190	1.190	1.190	1.180	130	1.200	1.190
	LACT	0.024	0.023	0.024	970.0	0.027	0.029	0.028	0.027	0.023	0.024	0.025	0.022	0.026	0.02	010		× 0.0	20.0	0.019	0.017	0.018	1.130			LACI	¥ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.018	0.022	0.023	0.022	0.022	0.022	0.020	0.022	0.022	0.019	0.020	0.019	0.021	0.022	0.023	0.021
. PHASE=1	MEAN	1.00	0.0	66.0	3:	1.01	0.99	0.99	0.99	9.0	0.99	0.99	1.01	1.0	5	8 8	6	5 6	3 6	3:	86.0	9.7	0.50	PHASE=1	i de La	TEAN FIOU	<b>*</b>	1.03															
DE=95-108-6-L	MED	32.1	54.7	5.7			55.5	35.3	35.3	35.2	35.3	35.2	35.3	35.3	35.3	35.3	45.4	, c		 	5.55	55.5	1.0	DE=95-36-9-R	Ä	TFIND	<u> </u>	33.9	34.3	54.5	54.4	54.7	54.7	24.8	34.9	34.9	34.9	34.9	34.9	34.9	5.4.0 0.4.0	54°5	٧.٠٧
-	BP MEAN	901	2 5	S .	ĵ:	<b>4</b> 6	۲ م	37	38	38	0,7	9	40	75	<b>43</b>	<b>7</b>	77	; <u>'</u>	} :	į į	<b>.</b>	÷ ;	જ	1DE=95	9	MFAN		<b>8</b> 9 !	<b>/</b> 9	<u>ک</u> ز	<b>4</b> t	<u>.</u>	3 :	3 :	34	32	28	17	1,1	Ç.	ð ;	9 t	<b>.</b>
ANIMAL/S	ART MEDPH	7.4	4.4	4.4	÷ .	. r	•	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.7	7 2		• •	÷ ,	÷ ,	<b>.</b> .	0.00	ANIMAL/SI	TOV	MEDPH	:	7.4	4.	* ·	. t	÷ ,	- r	<b>*</b> ·	4.7	7.4	4.7	7.4	7.4	4.	. t	. r	<b>*</b>
26/9	HUMI	34.4	25.6	25.	7.00	75.7	76.4	31.6	32.1	32.2	32.0	32.1	31.8	31.9	31.8	31.9	31.0	× 12	2 7		٠ ٠	7 .	5.1.S		Z	DITY	:	30.5	χ. γ.	, o	9 0	9 6	9 6	9 1	57.5	27.6	50.1	27.9	7.87	2 2	0.00	7.07	50.7
DATE=11/16/95	AIR	34.5	7.02	6. 5. 0. 0.	, ,	2,00	000		36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.2	36.1	3,4	3,4	3.5	7.00	- 6	7.00	DATE=11/22/95	AIA	TEMP	į	35.2		7.7	. 72	200.0	2.02	9.0	4.05	56.4	ر د ا	36.5	4.05	2,05.7	26.0	26.0	1
	REL- TIME	 8.6		 	3 6	9 6	0.00	3:	1.50	.00 1	2.50	% 80	3.50	4.00	4.50	2.00	5.50	9	2 4	5 6		. 0	0.00		PFI.	TI W	!	 8.					9 6	3 5	٠. د.	2.00 2.00	2.50	8.00 1.00	٠. د. د	9.4	2 6	, r.	) 1
FLAPN0=2596	ACTL TIME	9:15	0.75	3.5	10.15	7.7	1 4	_; _;	Ç;	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16.45	17.15	17.75	70.1	<u>.</u>	FLAPN0=2597	ACTI	TIME		9:15	7.50	7	10.15	10.17	11.15	11:17	11:40	5:51	C+:71	7:51 5:7	15:40	14:15	7.17	15.45	?
	TARG	9:15	57.0	10:00	10.15	10.65	14.44	C::1	C 1: 45	c1:21	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16-45	17.15	17.75	18.15	2.0		TARG	TIME														14:12			

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	OUN SUN	4.63 4.88 5.01 5.24 5.42		OLUG	0.01	0.35	1.04	1.83	2.58	3,25	3.79	4.21	4.66	4.89	5.39
NCSU≔Yes	GLUC	0.44 0.49 0.26 0.47 0.36	NCSU=Yes	GLUC	0.99	0.69	9.7.8	8.0	0.73	0.60	0.60	0.48	0.47 0.44	9,70	0.53
MEDVOL=513	ADJ RESIS	47.8 47.3 48.6 47.1 45.3		ADJ RESIS	77.8 58.9	59.1 50.8	45.4 42.9	38.9	44.8 44.8	50.3	48.7	54.7	57.3 59.1	59.8	58.1 83.0
	ADJ FLOW	0.98 0.99 0.99 0.99	MEDVOL=498	ADJ FLOW	0.96	0.98	0.95	0.95	0.95	0.95	0.96	0.95	0.96	0.97	0.8
GROUP=No Topical	VRE- SIST	47.2 46.8 48.0 46.5 44.8	GROUP=EtOH	VRE- SIST	74.6	56.7 48.8	44.7 74.2 7.2 7.3	37.4	39.2	48.2	46.8	52.5	56.7	57.4	25.7 79.6
	LACT	0.96 0.85 1.38 0.82		LACT	0.02	0.50	0.00	8.6	0.9	0.86	0.79	0.88	0.78	0.79	0.80
DOSETIME=10:15	DEXT ROSV	1.010 1.020 1.060 1.030	DOSETIME=9:58	DEXT	0.710	0.860	0.876	0.836	0.848	0.948	0.931	1.020	1.000	1.020	1.010
DOSETIM	LACT	0.185 0.182 0.161 0.165 0.157		LACT	0.030	0.141	0.276	0.325	0.329	0.246	0.229	0.206	0.180	0.177	0.179
FLAPWT=23.21 ontinued)	DEXT	1.180 1.210 1.160 1.210	FLAPWT=26.21	DEXT ROSA	1.140	1.160	1.150	1.19	1.160	1.210	1.190	1.230	1.190	1.220	1.210
క	LACT	0.021 0.020 0.023 0.018	PHASE=2 FL	LACT	0.020	0.022	0.020	0.019	0.021	0.021	0.024	0.021	0.020	0.020	0.019
PHASE=1	MEAN	0.1.00 1.00 1.01		MEAN	1.01	2.6	58.5	0.99	88	6.0	2.6	0.99	1.00	1.01	1.0
AL/SIDE=95-36-9-R	MED TEMP	34.9 34.9 34.9 34.9	NIMAL/SIDE=95-36-9-L	MED	34.4 35.1	35.3	35.5 35.6 7	35.7	35.7	35.7	35.8	35.8	35.8	35.8	35.7
S1DE=9!	BP MEAN	47 47 48 47 47	AL/SIDI	BP MEAN	5,7	65	3 7 5	3 23 25	2 23	84 84	47	22	5 5	. 23	% &
AN I MAL/	ART MEDPH	4.7.7. 4.4.4. 7.5.	•	ART Medph	7.4	7.4	4.4.	4.7	7.4	7.4	7.4	7.4	7.7	7.4	7.4
	HUMI	28.3 28.7 28.7 28.7 28.6	1/22/95	HUMI	33.2 32.5	31.9	30.8	30.0	30.2	30.0	29.6	30.1	30.7	28.8	30.4 30.2
FLAPNO=2597 DATE=11/22/95	AIR TEMP	36.5 36.5 36.5 36.5	DATE=11/22/95	AIR TEMP	35.3 36.0	36.3	36.6 36.7 26.8	36.8	36.9	36.8	36.9	36.9	36.9	36.9	36.8 36.9
.2597 DA	REL- TIME	6.50 7.00 7.50 8.00	FLAPN0=2598	REL- TIME	-0.97	-0.47	0.00	5.53	2.53	3.53	4.53	5.53	6.03	7.03	7.53 8.03
FLAPNO=	ACTL TIME	16:15 16:45 17:15 17:45 18:15	FLAF	ACTL TIME	9:00 9:15	9:30	10:30	11:30	12:30	13:30	14:30	15:30	16:00	17:00	17:30 18:00
1 6 6 7 8 8	TARG	16:15 16:45 17:15 17:45 18:15		TARG	9:00	9:30	10:00 10:30	11:30	12:30	13:30	14:30	15:30	16:00 16:30	17:00	17:30 18:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKROOT BSA

	SLUC	0.01	0.58	1.07	1.33	 4 :	2.40	2.73	20.5 7.08	3.85	4.19	4.55	4.92	5.24	5.57	2.86	6.17		SC	GLUC	0.01	0.22	0.42	0.58	4.0	00	1.55	1.83	2.12	2.41	200	3.20	3.49	3.76
NCSU=Yes	GLUC	1.66	0.55	0.59	0.62	79.0	0.77	79.0	9.0	2.0	0.70	0.72	0.74	0.63	0.65	0.59	0.62	NCSU=Yes	GLUC	UTIL	1.13	0.83	0.82	0.65	0.63	1.51	0.55	0.56	0.58	0.57	0.4 75.0	0.54	0.59	0.53
MEDVOL=515	ADJ RESIS	46.4 57.4 85.8	89.1	3.5	66.2	62.5 50.5	57.6	57.6	54.1	53.1	52.9	52.4	50.1	6.64	52.5	51.4	50.1	MEDVOL=479 NO	ADJ	RESIS	73.0	64.8	73.7	80.1	8. S	8 C	70.7	68.7	68.3	68.2	6.0	62.7	59.1	9.95
_	ADJ FLOW	0.01	0.9	0.98	0.98	0.0	.0.	0.97	8 8	88	0.98	0.97	1.00	1.00	0.95	0.97	0.98	MEDVO	AD	FLOW	0.92	0.0	0.92	0.94	0.93	5 6	0.91	0.93	0.92	9.9	20.0	0.93	0.91	0.94
GROUP=No Topica	VRE- SIST	46.1 57.0 85.1	88.4	72.7	65.7	62.0 50 1	57.1	57.1	53.7	52.7	52.5	52.0	8.64	49.5	52.1	51.0	46.7	GROUP=E tOH	VRE-	SIST	67.3	59.8	68.0	73.9	65.5	7.27	65.0	63.4	63.0	62.9	0.75 4.75	57.9	54.5	52.2
GROUP=	LACT	0.13	6.0	2.0	1.06	1.07	1.8	1.13	1.07	86.0	0.98	0.94	0.0	1.05	1.03	1.09	1.18		LACT	DEXT	0.12	0.31	0.47	0.59	0.78	8 6	1.01	1.07	1.05	0.9	- 6	1.04	0.99	1.07
DOSET IME=10:15	DEXT ROSV	0.591	0.918	0.954	0.927	0.922	0.915	906.0	0.933	0.939	0.948	0.916	0.915	0.937	0.928	0.937	0.905	DOSETIME=10:00	DEXT	ROSV	0.654	0.785	0.762	0.862	0.837	6.925	0.920	0.903	0.901	0.930	176.0 0 947	0.917	0.924	0.930
DOSETIM	LACT ATEV	0.085	0.170	0.233	0.260	0.269	0.296	0.302	0.289	0.278	0.267	0.266	0.259	0.256	0.270	0.256	0.293		LACT	ATEV	0.070	0.136	0.195	0.190	0.246	0.244	0.285	0.301	0.305	0.289	300	0.284	0.294	0.279
FLAPWT=23.22	DEXT	1.220	1.130	1.140	1.170	1.170	1.210	1.170	1.200	1.220	1.220	1.200	1.200	1.180	1.190	1.12	1.150	FLAPWT=29.89	DEXT	ROSA	1.220	1.210	1.170	1.180	1.150	2.1	1,200	1.180	1.190	1.220	220	1.190	1.220	1.190
_	LACT ATEA	0.003	0.003	0.003	0.003	0.003	0.001	0.004	0.002	00.0	0.001	0.00	0.002	0.001	0.001	0.00	0.004	PHASE=2 FL	LACT	ATEA	0.003	0.003	0.003	0.002	0.002	00.0	0.003	0.004	0.002	0.001	0.00	0.001	0.000	0.001
PHASE=	MEAN	1.02	8.8	9.6	0.99	9.6	1.02	0.98	5.5	. 5	0.99	0.98	1.01	1.01	96.0	0.98	0.99	12-L PHA	MEAN	FLOW	1.00	0.97	1.00	1.02	5.6		0.00	1.01	1.00	6.0	2.5	8	0.99	1.02
'SIDE=95-34-12-R	MED	35.7	35.3	35.4 35.4	35.4	35.5	35.5	35.5	35.55 5.55	35.5	35.5	35.5	35.5	35.4	35.5	35.5	35.6	/SIDE=95-34-1	MED	TEMP	34.2	34.5	33.7	34.9	34.7	55.7	35.4	35.3	35.3	35.3	35.5	35.3	35.3	35.3
IDE=95-	BP MEAN	27 47	8 8 8	8 22	92	<b>7</b> 6	88	26	χ χ	53	52	51	20	20	20	20	64	L/SIDE	ВР	MEAN	29	28	68	٤.	8	23	3 %	75	63	3 8	y 10	52	24	23
IMAL/	ART MEDPH	7.4	7.4	4.4.	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	ANIMA	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	4.6	7.7	7.4	7.4	7.4	<b>4</b> 4	7.4	7.4	7.4
/95 AN	HUMI	33.1 32.6 32.6	31.9	30.9	31.0	3.0 8.0	30.5	30.6	30.2 20.8	29.7	29.3	28.9	29.0	59.4	59.6	29.3	29.5	/29/95	HÜMI	DITY	35.8	31.6	28.6	31.2	27.6	8 c	28.7	28.8	28.2	28.0	2, 8,	29.0	28.7	27.9
DATE=11/29/95	AIR	36.7	36.7	36.8 36.9	36.9	36.9	36.8	36.9	36.9 26.9	36.9	36.9	36.9	36.9	37.0	36.9	36.9	37.0	DATE=11/29/95	AIR	TEMP	35.0	35.6	35.6	36.1	36.2	56.4	2, 2,	36.5	36.4	36.5	, 6 , 7 , 7	36.5	36.5	36.5
	REL- TIME	-1.00	-0.25	0.00	1.02	1.50	2.50	3.00	3.50	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00	FLAPN0=2600	REL-	TIME	-1.00	-0.73	-0.50	-0.25	0.0	0.50	5.0	2.00	2.50	8.8	7	4.50	5.00	5.50
FLAPN0=2599	ACTL TIME	9:15	0:01	10:15 10:45	11:16	11:45	12:45	13:15	13:45	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	FLAPN	ACTL	TIME	9:00	9:15	9:30	9:45	10:00	10:30	11.30	12:00	12:30	13:00	15:50	14:30	15:00	15:30
	TARG TIME	9:15 9:30	10:00	10:15 10:45	11:15	11:45	12:45	13:15	13:45	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15		TARG	TIME	00:6	9:15	9:30	6:42	10:00	10:30	11:30	12:00	12:30	13:00	15:50	14:30	15:00	15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

i			į							į	
	OLUC CUM	4.02 4.25 4.50 4.78 5.10		SLUC	0.01	0.88	1.81 2.10 2.41	2.65 2.87 3.09 3.33	3.57 3.82 4.08 4.53 4.53	CUM	0.01 0.22 0.39
NCSU=Yes	GLUC UTIL	0.51 0.48 0.50 0.56 0.63	NCSU=Yes	GLUC	0.91 0.63 0.53	0.59	0.62 0.58 0.58	0.48 0.44 0.42 0.51	0.47 0.53 0.45 0.45 0.50	NCSU=Yes Gluc	0.81 0.85 0.68
	ADJ RESIS	56.9 56.6 54.7 55.3 52.8		ADJ RESIS	64.3 50.7 48.3 47.3	46.7	55.2 57.6 53.2	75.6 77.4 76.0 78.2	80.1 80.2 77.8 81.1 76.0 69.3	MEDVOL=462 J ADJ	74.1 61.8 60.4
MEDVOL=479	ADJ FLOW R	0.93 0.92 0.93 0.92	MEDVOL=469	ADJ FLOW F	0.92 0.91 0.89	0.88	0.90 0.89 0.92	0.91 0.92 0.91	0.90 0.89 0.86 0.89	_	6.88 0.89 0.88
GROUP=E tOH	VRE- SIST	52.5 52.3 50.5 51.0 48.8	GROUP=EtOH M	VRE- SIST	58.1 45.8 43.7	43.9	48.2 50.7 52.0 57.1	68.3 70.0 68.7 70.6	72.4 72.4 70.3 73.3 68.7	GROUP=No Topical LACT VRE- A	55.0 53.8
	LACT	1.08 1.12 1.04 0.97		LACT	0.11	0.95	0.98 0.91 0.88	0.94 1.01 0.93	0.97 0.99 1.00 1.14 0.99	GROUP=N LACT	0.07 0.20 0.49
DOSETIME=10:00	DEXT ROSV	0.946 0.932 0.944 0.900	DOSETIME=9:58	DEXT	0.699 0.861 0.909	0.872 0.854 0.815	0.825 0.829 0.839 0.818	0.886 0.891 0.908 0.865	0.888 0.868 0.878 0.886 0.918	DOSETIME=10:15 LACT DEXT	0.765 0.732 0.803
	LACT	0.276 0.270 0.256 0.275 0.315		LACT	0.055 0.103 0.161	0.264 0.321 0.343	0.339 0.330 0.301 0.303	0.248 0.241 0.254 0.265	0.253 0.277 0.267 0.287 0.287	DOSETIM	ATEV 0.027 0.078 0.152
FLAPWT=29.89 tinued)	DEXT ROSA	1.200 1.170 1.190 1.180	FLAPWT=33.38	DEXT	1.200 1.210 1.210	1.190	1.150 1.170 1.160	1.150 1.140 1.150	1.150 1.170 1.170 1.170	FLAPWT=26.77 ACT DEXT	1.130 1.110 1.110
PHASE=2 FLAPWT (continued)	LACT	0.001 0.003 0.001 0.003	PHASE=2 FL/	LACT	0.000	0.000	0.004	0.000	0.000 0.001 0.002 0.002 0.002		ATEA 0.000 0.001
	MEAN	1.001.00		MEAN	1.02	1.00	1.02	 1.02.1.	1.00 0.98 0.96 0.99 0.99	PHASE=1 Mean	0.9 1.00 0.99
SIDE=95-34-12-L	MED	35.3 35.3 35.3	/SIDE=95-34-9-L	MED	34.9 34.8 35.0	35.2 35.4 35.4	35.4 35.5 35.4	35.6 35.2 35.2	35.33 35.33 35.44 35.44	IE=95-39-15-R BP MED	35.8 35.6 35.5
-/SIDE=	BP MEAN	53 51 51 54		BP MEAN	£7 69 65	222	51 51 58	% 5 8 5 8 5 7 8 7	72 71 70 88 62	_	MEAN 65 55 53
ANIMAL/	ART Medph	7.7 7.4 7.7 7.7	ANIMAL	ART MEDPH	4.7.7	7.4	7.5	7.4 7.4 7.4	44444	ANIMAL/SII ART	MEDPH 7.4 7.4 7.4
56/62/	HUM1 DITY	27.9 28.1 28.4 28.5 28.5	DATE=11/30/95	HUMI	31.4 31.8 31.1	30.5	30.4 30.1 30.1 29.9	30.0 30.0 29.9 29.7	29.5 30.3 30.6 30.6	Ξ	32.8 30.7 30.4
DATE=11/29/95	AIR TEMP	36.5 36.5 36.5 36.5	DATE=1	AIR TEMP	35.9 35.8 36.1	36.4 36.6 36.6	36.7 36.7 36.8 36.7	36.7 36.6 36.6 36.6	36.6 36.6 36.6 36.7	DATE=12/06/95 AIR HUI	36.1 36.4 36.3
FLAPNO=2600	REL- Time	6.00 6.50 7.00 7.50 8.00	- FLAPNO=2602	REL- TIME	-0.97 -0.72 -0.47	0.00	2.53 2.53 3.03	3.53 4.03 5.03	5.53 6.03 7.03 7.53 8.03	ᇳ	-1.00 -0.75 -0.50
- FLAPN	ACTL TIME	16:00 16:30 17:00 17:30 18:00	· FLAP	ACTL TIME	9:00 9:15 9:30	9:58 10:30 11:00	11:30 12:00 12:30 13:00	13:30 14:00 14:32 15:00	15:30 16:00 16:30 17:00 17:30	FLAPNO=2603 ACTL RI	9:15 9:30 9:45
	TARG	16:00 16:30 17:00 17:30 18:00		TARG TIME	9:00 9:15 9:30 9:50	10:00 10:30 11:00	11:30 12:00 12:30 13:00	13:30 14:00 14:30 15:00	15:30 16:00 16:30 17:00 17:30	TARG	11ME 9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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	OLUC CUM	0.55 1.04 1.31 1.62 1.96 1.96 1.96 2.31 2.31 3.45 3.45 4.76 4.76 5.13 5.13 5.25 5.25 5.25 5.25 5.25 5.25 5.25 5.2	CUM GLUC 0.01 0.03 0.53 0.74 1.02 1.02 1.02 1.02 1.03 3.04 3.30 4.12 4.12
NCSU=Yes	GLUC UTIL	0.62 0.65 0.65 0.55 0.63 0.67 0.57 0.57 0.59 0.70 0.70 0.78 0.78	0.84 0.88 0.65 0.65 0.65 0.65 0.65 0.55 0.56 0.56
MEDVOL=462	ADJ RESIS		ADJ 63.2 63.2 52.5 52.5 52.7 661.1 661.5 65.5 65.5 73.7 73.7 79.7 79.7
	ADJ FLOW	0.89 58.7 0.90 52.3 0.88 56.7 0.88 56.7 0.89 64.8 0.89 64.8 0.90 87.1 0.90 81.2 0.89 90.3 0.89 88.1 0.89 88.1 0.89 88.1	ADJ 1.00 0.97 0.98 0.98 0.98 0.98 0.99 0.99 0.99 0.99
GROUP=No Topical	VRE- SIST	25.3 26.46.5 26.46.5 26.51.8 27.51.3 27.57.7 28.7.7.7 29.0 20.0	VRE- SIST 62.4 51.8 54.0 660.3 64.6 64.6 64.6 772.7 772.7 772.7 772.7 773.6 80.4 78.6 778.6 778.6
GROUP=N	LACT		LACT DEXT 0.03 0.16 0.31 0.51 0.85 0.94 1.02 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0
DOSETIME=10:15	DEXT	89 0.824 0.625 0.840 0.63 0.840 0.95 0.840 0.95 0.85 0.95 0.85 0.95 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.8	DEXT ROSV 0.759 0.742 0.847 0.889 0.889 0.939 0.939 0.931 0.952
DOSETIM	LACT	- (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3 (3	LACT ATEV 0.015 0.063 0.105 0.141 0.216 0.226 0.236 0.238 0.238 0.228 0.228 0.228
FLAPWT=26.77 continued)	DEXT	0.000 1.100 0.000 0.100 0.000 0.100 0.000 0.130 0.000 0.000 0.130 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.140 0.000 0.000 0.000 0.140 0.000 0.000 0.000 0.000 0.140 0.000 0.000 0.140 0.000	DEXT ROSA 1.110 1.120 1.120 1.120 1.120 1.140 1.140 1.140 1.150 1.150 1.150
_	LACT	0.001 0.000 0.000 0.000 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002	ATEA 0.004 0.003 0.003 0.002 0.002 0.003 0.003 0.003 0.003 0.003 0.003
PHASE=1	MEAN		MEAN 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
E=95-39-15-R	MED	\$2 35.5 1.0 4.7 35.6 1.0 4.5 35.6 1.0 4.5 35.6 1.0 4.5 35.8 1.0 4.5 35	MED 34.5 34.5 35.1 35.1 35.2 35.3 35.3 35.3 35.3 35.4 35.3 35.5 35.5
_	8P MEAN		MEAN 63 64 64 64 64 64 67 77 77
ANIMAL/SI	ART MEDPH	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	MED PH
	HUMI DITY	30.8 30.08 30.05 30.05 22.66 28.7 30.00 30.00 30.01 31.5 31.5	HUMI 30.6 31.2 28.2 27.7 27.2 27.3 27.3 27.3 27.3 27.3 27
DATE=12/06/95	AIR TEMP	36.3 30.8 36.3 30.8 36.3 30.0 36.4 29.6 36.4 28.9 36.4 28.0 36.4 28.0 36.4 28.0 36.4 28.0 36.5 27.7 36.5 28.1 36.5 31.5 DATE=12/06/95	AIR 35.4 35.5 36.6 36.6 36.9 36.9 37.0 37.0 37.0 37.0
	REL- TIME	15 0.02 15 0.00 15 0.00 15 1.00 15 2.00 15 2.00 15 2.00 15 4.00 15 4.00 15 6.00 15 6.00 15 6.00 15 1.00 16 1.00 17 1.00 18 1.00 19 1.00 10 1.00 11 1.00 11 1.00 12 1.00 13 1.00 14 1.00 15 1.00 16 1.00 17 1.00 18 1.00 19 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10 1.00 10	7. FEL- 1.70 1.70 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.5
FLAPN0=2603	ACTL TIME	10:00 10:15 11:15 11:15 11:45 12:15 13:15 13:15 14:45 14:45 16:15 16:15 16:15 17:15 17:15	ACTL TIME 9:00 9:45 9:45 10:00 11:30 11:30 12:30 12:30 14:30 14:30 15:30 16:30
1 1 9 2 1 1	TARG	10:00 10:15 11:15 11:15 12:45 13:15 14:15 15:15 15:15 16:15 16:15 18:15	TARG 9:00 9:15 9:45 9:45 10:00 11:00 11:30 12:30 12:30 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00

## TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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	OLUC CUM	5.04 5.04 5.40		CUM	0.01	0.54	1.03	1.97	2.54	3.01 2.01	3.46 7.4	3.87	4.08	4.65		GLUC GLUC	0.01 0.21 0.36 0.51
NCSU=Yes	GLUC	0.52 0.79 0.74	NCSU=Yes	GLUC UTIL	0.83	69.0	0.63	0.59	0.54	0.44	0.51	0.39	0.43	0.56	NCSU=Yes	GLUC	0.69 0.80 0.59 0.60 0.57
	ADJ RESIS	76.7 72.0 73.0		ADJ RESIS	50.0 44.1	44.4	48.2 46.7 53.5	59.0 65.6	82.2	91.8	90.5	87.8	87.2 86.5	88.1 92.0	MEDVOL=508	ADJ RESIS	45.1 37.4 40.2 41.9 39.4
MEDVOL=512	ADJ FLOW	0.99	MEDVOL=475	ADJ FLOW	0.92	0.92	0.89	0.92	0.92	0.92	0.91	0.93	0.93	0.92		ADJ FLOW	1.00 0.99 0.97 0.98 0.98
GROUP=EtOH	VRE- SIST	75.6 71.0 72.0	GROUP=E tOH	VRE- SIST	45.8	6.4 6.6 6.6	44.1	54.0	75.2	84.0	82.8	80.4	3.5 2.5 2.5	80.6 84.2	GROUP=No Topical	VRE- SIST	44.1 36.6 39.4 41.0 38.6
	LACT	1.05		LACT	0.15	0.71	0.92	0.97	0.97	0.89	1.0	1.06	0.98	0.83	GROUP=	LACT	0.06 0.26 0.48 0.67
DOSETIME=10:00	DEXT ROSV	0.953 0.840 0.850	DOSETIME=10:15	DEXT	0.740	0.811	0.832	0.877	0.893	0.943	0.905	0.989	0.929	0.892	DOSETIME=10:00	DEXT	0.776 0.771 0.856 0.844 0.835
	LACT	0.229 0.340 0.312		LACT	0.067	0.244	0.296	0.286	0.263	0.197	0.259	0.206	0.205	0.232	DOSETIM	LACT	0.027 0.102 0.139 0.195
FLAPWT=25.21 tinued)	DEXT	1.170	FLAPWT=29.72	DEXT	1.150	1.150	1.150	1.170	1.160	1.160	1.160	1.180	1.180	1.170	FLAPWT=28.55	DEXT ROSA	1.100 1.150 1.140 1.130
PHASE=2 FLAPWT (continued)	LACT	0.002 0.002 0.001	PHASE=2 FL	LACT	0.004	0.004	0.003	0.003	0.003	0.003	0.002	0.003	0.005	0.002		LACT	0.006 0.005 0.004 0.004
	MEAN	1.00		MEAN	1.01	5.5	1.01	888	2.8	88	0.9	1.02	7.07	 	PHASE=1	MEAN	1.02 0.99 1.00 0.99
ANIMAL/SIDE=95-39-15-L	MED	35.4 35.4 35.4	SIDE=95-39-13-R	MED	35.4	35.7	35.9	36.1	36.2	36.2	36.2	36.2	36.2 36.2	36.2 36.2	E=95-39-13-L	MED TEMP	35.3 35.1 35.2 35.2
L/SIDE:	BP MEAN	828		BP MEAN	46	42	£3 63	8 %	22	<b>%</b> %	8 8	8 8	8 8	85	IDE=95	BP MEAN	45 37 39 41
ANIMA	ART MEDPH	7.4	ANIMAL/	ART Medph	7.4	7.4	7.4	7.7	7.4	7.4	7.4	7.4	7.4 7.4	7.4	ANIMAL/SID	ART Medph	7.4
DATE=12/06/95	HUMI	26.0 26.4 27.3	DATE=12/07/95	HUM1 DITY	31.7	32.4	29.8 32.1	3.7.5 5.7.5	28.2	24.8	29.6	26.4	32.0 31.4	31.7 27.7		HUMI	29.2 32.0 30.7 27.3 29.7
DATE=12	AIR	37.0 37.0 37.0	DATE=12	AIR TEMP	35.6	36.1 35.9	35.6 36.0 35.0	32.5	35.9	35.9	36.1	36.0	35.8	35.8 36.0	DATE=12/07/95	AIR	36.3 36.5 36.5 36.6
FLAPNO=2604	REL- TIME	7.00	FLAPNO=2605	REL- TIME	-1.00	6.23	1.00	2.00	3.00	4.00		6.00	6.50 7.00	7.50 8.00		REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAPN	ACTL TIME	17:00 17:30 18:00	FLAPN	ACTL TIME	9:15	10:00	10:45	12:15	13:15	14:15	15:15	16:15	16:45 17:15	17:45 18:15	FLAPNO=2606	ACTL TIME	9:00 9:15 9:30 9:45
1 1 1 1 1 1 1 1	TARG	17:00 17:30 18:00		TARG	9:15	10:00 10:15	10:45	12:15	13:45	14:15	15:15	16:15	16:45 17:15	17:45 18:15		TARG TIME	9:00 9:15 9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	GLUC	2.75 2.75 2.75 2.75 3.03 3.88 3.88	4.53	CUM	0.01 0.34 0.59 0.59 0.59 3.33 3.33 3.34 4.51 5.73 6.02
NCSU=Yes	GLUC UTIL	0.65 0.65 0.52 0.37 0.35 0.35 0.40 0.42	0.57 0.57 NCSU=Yes	GLUC UTIL	2.39 1.30 1.04 1.17 1.17 1.15 1.04 0.57 0.57 0.58 0.57 0.65 0.65 0.63
MEDVOL=508	ADJ RESIS	42.7 43.9 47.5 58.2 67.1 70.5 77.8 77.8 73.6 73.6 73.6	98 84.4 MEDVOL=514	ADJ RESIS	33.33.33.33.33.33.33.33.33.33.33.33.33.
	ADJ FLOW	20.098 0.098 0.098 0.098 0.098 0.098 0.098 0.098 0.098		ADJ FLOM	0.99 0.99 0.99 0.98 0.98 0.99 0.99 0.99
o Topic	VRE- SIST	43.0 45.5 57.0 65.7 70.3 70.3 77.6 77.6 77.6 77.6	82.6 82.6 o Topic	VRE- SIST	33.33.33.33.33.33.33.33.33.33.33.33.33.
GROUP=No Topical	LACT	0.86 0.91 1.07 1.08 1.08 1.08 1.08	0.95 82.6 0.6 GROUP=No Topical	LACT	0.10 0.45 0.65 0.87 0.98 0.98 0.98 1.11 1.11 1.00 0.99 0.85 0.87
DOSETIME=10:00	DEXT	0.835 0.874 0.918 0.922 0.946 1.010 0.985 0.985 1.020 0.967	0.260 0.900 0.261 0.900	DEXT ROSV	0.496 0.804 0.868 0.835 0.839 0.972 1.020 0.991 0.991 0.998 1.000 0.987 1.000
DOSETIM	LACT ATEV	0.276 0.272 0.264 0.259 0.183 0.176 0.183 0.200 0.212 0.215	0.260 0.260 DOSETIN	LACT ATEV	0.074 0.170 0.222 0.293 0.293 0.298 0.298 0.171 0.171 0.186 0.165 0.165 0.157
FLAPWT=28.55 continued)	DEXT	1.150 1.170 1.160 1.180 1.180 1.150 1.170 1.170 1.170	004 1.170 004 1.170 FLAPWT=16.84	DEXT ROSA	1.170 1.170
3	LACT	0.004 0.004 0.003 0.003 0.003 0.003 0.003 0.003 0.003		LACT	0.004 0.004 0.003 0.003 0.005 0.005 0.005 0.005 0.005 0.006 0.006 0.006 0.006 0.006
PHASE=1	MEAN	800100886000000000000000000000000000000	1.01 1.01 PHASE=1	MEAN	0.0000000000000000000000000000000000000
AL/SIDE=95-39-13-L	MED	88888888888888888888888888888888888888	.5 83 36.2 AL/SIDE=95-39-14-R	MED	88888888888888888888888888888888888888
10E=95.	BP MEAN	<b>7.2.7.7.8.8.7.2.7.8.7.2.7.8.7.2.7.8.7.2.7.8.7.2.7.2</b>	83 83 1DE=95	BP MEAN	20 20 20 20 20 20 20 20 20 20 20 20 20 2
ANIMAL/S	ART MEDPH	444444444444	7.5 ANIMAL/S	ART Medph	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	HUMI DITY	29.1 29.1 29.3 28.5 26.6 27.4 27.7 27.4 27.4 27.4 27.4 27.4 27.4	. N	HUMI DITY	33.8 33.8 33.2 33.2 33.2 33.2 33.2 33.2
DATE=12/07/95	AIR	35.7. 37.0. 37.0. 37.7. 37.5. 37.5. 37.5.	DATE=12/13/95	AIR	23.5. 2.2. 2.2. 2.3. 2.3. 2.3. 2.3. 2.3.
	REL- Time	2.1.00 2.00 2	. ·	REL- TIME	7-1.00 -0.75 -
FLAPNO=2606	ACTL TIME	10.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30 11.30	18:00 8. FLAPNO=2607	ACTL TIME	9:15 9:30 9:30 10:00 10:15 11:15 11:45 12:45 13:45 14:45 16:15 16:45 17:15
	TARG	11:30 11:30 12:30 13:30 14:30 15:30 15:30 16:30 17:30 17:30		TARG TIME	9:15 9:30 9:30 10:00 10

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

;			;																	:		
	OLUC CUM	6.62		OLUC CUM	0.01	0.55	1.05	1.90	2.24	2.83 2.83	3.10	3,37	3.00 50.00	4.22	4.52	6.4	7. 4 2 4	5.63	5.88		CUM	0.01 0.23 0.41 0.56 0.69 1.16
NCSU=Yes	GLUC UTIL	99.0	NCSU=Yes	GLUC UT1L	2.89	0.99	1.0	 	0.68	0.5 0.64	0.53	0.55	0.58	0.54	0.60	0.77	0.48	0.51	0.50	NCSU=Yes	GLUC	0.89 0.73 0.53 0.50 0.46
MEDVOL=514	ADJ RESIS	54.8		ADJ RESIS	35.9	38.7 40.4	37.4	55.0 49.1	54.3	56.9 57.7	59.0	60.9	2.00	9.09	63.1	.0.0 .0.0	8.29	63.5	64.5	MEDVOL=518	ADJ RESIS	61.4 46.2 41.3 43.9 46.6 54.5
	ADJ FLOW R	0.99	MEDVOL=504	ADJ FLOW F	0.98	86.	8.	. %	8 1	. 6.	26.	8.5	8	6	26.	%!	× 6	98.0	%.		ADJ FLOW	0.99 0.99 0.99 0.99
GROUP=No Topical	VRE- SIST F	54.3 0	GROUP=EtOH M	VRE- SIST F	34.8 0 37.4 0								,					61.7		GROUP=No Topical	VRE- SIST F	61.3 46.1 11.2 43.8 146.5 54.4 60.3
GROUP=No	LACT	0.87		LACT	0.05	0.74	0.95	1.06	0.95	1.12 0.85	1.01	0.94	0.50	1.01	0.84	0.55	3.5	0.96	0.99	GROUP=N	LACT	0.08 0.39 0.75 0.75 0.90
DOSETIME=10:15	DEXT	0.973	DOSETIME=10:00	DEXT	0.242	0.831	0.828	0.889	0.936	0.968	0.992	0.982	0.99	0.993	0.991	0.903	0.00	0.979	0.982	DOSETIME=10:15	DEXT	0.747 0.769 0.830 0.855 0.918 0.944
DOSETIM	LACT	0.165		LACT	0.045	0.230	0.309	0.259	0.206	 5.1.0	0.171	0.169	0.173	0.170	0.159	0.139	0.154 0.155	0.156	0.159	DOSETIM	LACT	0.032 0.082 0.132 0.160 0.172 0.182
FLAPWT=16.84 continued)	DEXT	1.160	FLAPWT=18.94	DEXT	1.150	1.150	1.150	1.130	1.150	1.130	1.160	1.160	1.180	1.160	1.180	1.150	1.160	1.140	1.140	FLAPWT=26.34	DEXT	1.140 1.150 1.130 1.140 1.150
3	LACT ATEA	0.003	PHASE=2 FL	LACT	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001	0.004		0.002	0.002		LACT	0.002 0.005 0.006 0.006 0.006
PHASE=1	MEAN	1.00		MEAN	1.01	. 6	0.99	0.99	1.01	8.8	1.00	0.98	5 5	1.02	1.00	0.99	8 8	1.03	0.99	PHASE=1	MEAN	1.00
E=95-39-14-R	MED	36.0	ANIMAL/SIDE=95-39-14-L	MED	34.4	35.1	35.1	35.2	35.3	35.3	35.3	35.3	35.5	35.5	35.4	35.5	4. 7. 4. 7.	35.5	35.4	DE=95-35-5-R	MED	35.5 35.5 35.7 35.7 35.7 35.7
	BP MEAN	24	/SIDE=	BP MEAN	38 33	% &	38	74	53	ი ჯ	27	8 8 8	y 2	9	<b>6</b> 1	25	ة م	6 29	62		BP MEAN	61 44 60 53
ANIMAL/SID	ART MEDPH	7.4	ANIMAL	ART MEDPH	7.4	4.7 4.5	7.4	7.4	7.4	7.4	7.4	7.7	4.7	7.4	7.4	7.4	<b>5.</b> /	. 4.	7.4	ANIMAL/SI	ART MEDPH	444444
	HUMI DITY	32.0	/13/95	HUMI DITY	34.8	32.2 31.6	31.3	30.5	30.1	30.5	30.0	30.2	30.0	30.5	30.7	31.2	5 4 7	38.5	31.0		HUMI DITY	37.4 36.7 36.7 36.6 36.6 37.4
DATE=12/13/95	AIR TEMP	37.6	DATE=12/13/95	AIR	35.7	36.7 36.7	36.7	36.9	37.0	37.0	36.9	37.0	37.1	37.1	37.0	37.5	27.1	37.1	37.1	DATE=12/14/95	AIR TEMP	36.4 36.8 36.9 37.0 37.1 37.1
	REL- TIME	8.00	FLAPNO=2608	REL- TIME	-1.00	-0.50	0.0	.05	1.50	2.50	3.00	3.50	4.50	5.00	5.50	9.00	0°.7	7.50	8.00		REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00 1.00
FLAPNO=2607	ACTL TIME	18:15	FLAPN	ACTL TIME	9:00	9:50 9:45	10:00	11:00	11:30	12:30	13:00	13:30	14:30	15:00	15:30	16:00	17:00	17:30	18:00	FLAPNO=2609	ACTL TIME	9:15 9:30 9:45 10:00 10:15 11:15
	TARG TIME	18:15		TARG	9:00	9:50 9:45	10:00	11:00	11:30	12:30	13:00	13:30	14:00	15:00	15:30	16:00	16:30	17:30	18:00		TARG TIME	9:15 9:30 9:45 10:00 10:45 11:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	OLUC CUM CUM	1.42 1.64 1.90 2.14 2.37 2.61 2.85 3.06	3.54 4.04 4.34 4.66
NCSU=Yes	GLUC UTIL	0.52 0.45 0.51 0.47 0.48 0.48	0.46 0.45 0.56 0.60
MEDVOL=518	ADJ RESIS	69.5 73.0 78.5 88.5 85.0 87.2 80.4	66.8 69.1 67.8 67.5 62.1
	ADJ FLOW	0.99 0.99 0.99 0.99 1.00 1.00	
GROUP=No Topical	VRE- SIST	69.3 72.9 78.5 88.3 84.8 82.0 81.0 75.5	66.7 69.0 67.7 67.3
GROUP=1	LACT	0.92 1.05 0.94 0.91 0.91	0.93 0.97 1.09 0.89
DOSETIME=10:15	DEXT	0.921 0.935 0.947 0.942 0.950 0.960 0.984	0.988 0.974 0.944 0.910 0.902
DOSETIA	LACT	0.217 0.201 0.200 0.206 0.193 0.195 0.190	0.190 0.193 0.272 0.269 0.253
FLAPWT=26.34 continued)	DEXT	1.150 1.130 1.160 1.150 1.150 1.170 1.170	1.190 1.170 1.170 1.180
	LACT	0.007 0.006 0.007 0.005 0.003 0.004 0.002	0.003 0.003 0.003 0.005
PHASE=	MEAN	1.00 0.99 0.99 0.99 0.99 0.99 0.99	1.00.1.00
ANIMAL/SIDE=95-35-5-R	MED	35.58 35.88 35.98 35.99 35.99 35.99	33 33 33 35 35 35 35 36 36 36 36
S10E=9!	BP MEAN	69 74 88 88 88 73 73 74	64 68 68 68 68
ANIMAL/	ART MEDPH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4444
14/95	HUMI	38.3 39.5 39.8 39.9 39.7 39.3 39.3	38.1 37.5 36.9 36.6 36.8
DATE=12/14/95	AIR	37.22 37.22 37.22 37.33 37.33 37.33 37.33 37.33 37.33	37.3 37.2 37.3 37.3
	REL- TIME	1.50 2.90 3.00 3.50 4.00 6.50 7.00 7.00 7.00 7.00 7.00 7.00 7.00 7	6.90 6.50 7.90 7.50 8.00
FLAPNO=2609	ACTL TIME	11:45 12:15 13:45 13:45 14:45 15:45	16:15 16:45 17:15 17:45 18:15
	TARG	11:45 12:15 12:45 13:15 13:45 14:15 14:15 15:15	16:15 16:45 17:15 17:45 18:15

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SUM	GLUC	0.01	0.19	0.36	0.52	99.0	96.0	1.18	1.43	1.66	1.90	2.14	2.35	2.59	2.80	3.01	3.22	3.45	3.67	3.92	4.18	4.45
NCSU=Yes -	GLUC	UTIL	0.78	0.73	0.68	0.62	0.59	0.58	0.45	0.49	0.47	0.48	0.48	0.42	0.48	0.41	0.43	0.41	0.48	0.43	0.50	0.52	0.54
-510	ADJ	RESIS	98.2	24.7	51.9	49.1	45.5	53.4	57.4	70.3	67.2	69.5	71.6	ر ا	67.5	74.0	75.3	62.0	72.6	71.2	67.5	65.1	63.4
MEDVOL	ADJ	FLOW	0.99	0.99	96.0	96.0	0.99	0.99	0.99	0.97	9.	0.99	0.98	0.97	0.99	0.97	0.98	26.0	0.98	1.00	0.98	0.98	0.98
GROUP=EtOH	VRE-	SIST	96.5	53.7	51.0	48.2	41.8	52.5	56.4	0.69	99	68.3	70.4	71.7	66.3	72.7	74.0	6.09	71.4	20.0	66.3	64.0	62.3
	LACT	DEXT	0.05	97.0	0.38	0.50	0.70	9.76	0.89	0.86	1.01	0.80	0.0	0.95	0.78	0.97	0.95	0.98	98.0	1.03	0.88	0.87	0.93
TIME=10:00	DEXT	ROSV	0.741	0.775	0.840	0.877	0.898	0.912	0.969	0.959	0.962	996.0	996.0	1.000	0.956	0.995	0.990	0.995	0.986	0.999	996.0	0.968	0.947
82 DOSE	LACT	ATEV	0.024	0.089	0.122	0.147	0.189	0.203	0.184	0.197	0.217	0.180	0.202	0.187	0.174	0.185	0.187	0.186	0.188	0.202	0.203	0.207	0.232
FLAPWT=26.82	DEXT	ROSA	1.090	1.100	1.150	1.160	1.160	1.170	1.170	1.180	1.170	1.180	1.180	1.190	1.170	1.180	1.180	1.180	1.200	1.190	1.190	1.200	1.190
PHASE=2 FL	LACT	ATEA	0.005	0.005	0.005	900.0	900.0	900.0	0.002	0.007	900.0	0.008	0.00	900.0	0.008	0.005	0.007	0.005	0.003	0.005	0.005	900.0	900.0
	MEAN	FLOW	1.01	1.01	0.98	0.98	1.01	1.01	1.01	0.99	1.02	1.01	9.0	0.99	1.01	0.99	1.00	0.99	.0	1.02	1.00	1.00	1.00
.SIDE=95-35-5-1	WED	TEMP	34.8	34.8	35.2	35.2	35.3	35.6	35.6	35.5	35.5	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.7	35.6	35.6	35.6
AL/SIDE	B	MEAN	26	24	20	25	75	23	25	89	29	69	2	7	29	22	7.	9	7	7	99	4	62
S ANIM	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=12/14/95	HUMI	DITY	36.5	36.1	34.5	34.0	34.1	33.7	34.5	35.0	36.1	36.4	37.3	36.8	36.9	37.1	36.2	35.7	35.5	34.9	34.2	33.9	33.2
DATE=1	AIR	TEMP	36.7	36.5	36.7	37.0	37.0	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.3	37.3	37.3	37.3	37.3	37.3	37.2	37.3
FLAPNO=2610	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAP	ACTL	TIME	9:00	9:15	9:30	9:45	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00
	TARG	TIME	9:00	9:15	9:30	9:45	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

! ! ! !	CUM	0.01	0.22	0.41	0.58	0.75	1.09	1.32	1.57	1.80	5.06	2.30	2.53	2.77	3.01	3.22	3.43	3.63	3.83	4.08	4.38	4.38
NCSU=Yes	GLUC UTIL	0.87	0.84	0.76	0.70	29.0	69.0	97.0	0.49	0.47	0.52	0.48	97.0	97.0	0.48	0.43	0.43	0,40	0.39	0.50	09.0	•
MEDVOL=488	ADJ RESIS	102.1	51.0	7.74	43.6	42.1	41.0	50.2	56.9	52.6	57.5	84.8	63.1	64.1	69.1	73.1	73.4	77.3	78.3	67.3	64.1	,
	ADJ FLOW	0.93	0.92	0.95	0.94	0.95	0.93	0.94	0.93	0.93	0.92	0.93	0.94	0.94	0.94	0.93	0.94	0.93	0.94	0.94	0.94	
GROUP=No Topical	VRE- SIST	0.96	48.0	44.6	41.0	39.6	38.6	47.2	53.5	49.5	54.1	6.09	59.3	60.3	65.0	68.7	0.69	72.7	73.6	63.3	60.3	•
GROUP	LACT	0.08	0.30	0.48	0.69	0.78	0.91	1.00	1.01	1.06	0.94	1.01	1.02	1.00	0.91	0.99	1.04	1.01	1.03	1.07	1.07	1.29
DOSETIME=10:30	DEXT ROSV	0.709	0.727	0.778	0.801	0.828	0.812	0.920	0.894	0.903	0.898	0.905	0.908	0.918	0.911	0.921	0.925	0.945	0.944	0.900	0.845	0.727
DOSETIM	LACT	0.037	0.120	0.167	0.221	0.236	0.292	0.214	0.232	0.232	0.230	0.231	0.222	0.215	0.204	0.202	0.208	0.190	0.188	0.251	0.599	0.499
FLAPWT=27.42	DEXT	1.110	1.120	1.120	1.120	1.130	1.130	1.130	1.120	1.120	1.140	1.130	1.120	1.130	1.130	1.120	1.120	1.130	1.120	1.130	1.120	1.110
	LACT	0.003	0.003	0.003	0.002	0.001	0.003	0.004	0.003	0.003	0.003	0.003	900.0	0.004	0.005	0.005	900.0	0.004	0.007	0.005	0.005	0.005
PHASE=1	MEAN	0.99	0.98	1.01	0.1	1.01	0.99	1.00	66 0	0.9	0.98	0.99	9.	9.	9.	0.99	1.00	0.99	1.01	9.	1.00	
DE=96-45-6-R	MED	33.8	34.4	35.4	35.6	35.7	35.7	35.8	35.8	35.9	35.9	32.8	35.9	32.9	36.1	36.0	36.0	36.0	36.0	35.9	35.9	37.3
_	BP MEAN	95	47	45	41	40	38	25	23	65	23	9	26	9	65	89	69	22	7,	63	9	
ANIMAL/S	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4
1/96	HUMI DITY	34.1	34.3	33.2	31.6	35.0	32.5	29.6	31.9	34.6	32.4	32.0	34.0	34.2	33.6	34.0	33.1	•	•	•	٠	•
DATE=01/11/96	AIR	35.3	34.4	34.9	35.4	35.4	35.5	35.5	35.6	35.5	35.6	35.5	35.5	35.6	35.6	35.6	35.6	35.5	35.4	35.4	35.4	35.2
	REL- TIME	-1.00	-0.75	-0.50	-0.25	0.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	<b>7</b> .00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAPN0=2611	ACTL TIME	9:30	9:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	9:30	6:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	CUM	0.01 0.028 0.039 0.039 0.039 1.35 1.35 2.25 2.	3.20 3.41
NCSU=Yes .	GLUC	1.23 0.60 0.49 0.45 0.52 0.53 0.55 0.55 0.56	0.51
.=483	ADJ RESIS	37.6 32.7 33.8 33.8 33.9 30.2 30.2 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28	32.2 32.7
MEDVOL	ADJ FLOW	0.92 0.93 0.93 0.93 0.93 0.93 0.93	0.93
GROUP=EtoH	VRE- SIST	35.0 30.5 31.5 31.5 26.4 27.0 27.1 28.6 27.3 27.3 27.3	30.0
	LACT	0.05 0.033 0.082 0.098 0.094 0.001 0.033 0.033	1.08
DOSETIME=10:15	DEXT	0.583 0.833 0.894 0.896 0.886 0.868 0.868 0.868 0.868 0.888	0.898
	LACT	0.031 0.091 0.131 0.231 0.239 0.241 0.241	0.217
FLAPWT=26.29	DEXT ROSA	1.120 1.120 1.120 1.120 1.120 1.120 1.120	1.120
PHASE=2 FL	LACT	0.003 0.003 0.003 0.003 0.003 0.003 0.003	0.003
	MEAN	0.0000000000000000000000000000000000000	2.06.
NIMAL/SIDE=96-45-6-L	MED	24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25	35.6 35.7
AL/SIDE	BP MEAN	288233333333333333333333333333333333333	388
×	ART MEDPH	444444444444	7.7.
DATE=01/11/96	HUMI DITY	31.0 28.5 28.5 27.0 27.2 27.2 29.0 29.0 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5	30.0 29.6
	AIR	35.0 37.1 37.5 37.5 37.5 37.5 37.5 37.5 37.5	37.5 37.5 37.4
- FLAPNO=2612	REL- TIME	-1.00 -0.75 -0.50	5.00
FLAP	ACTL TIME	9:15 9:30 9:30 9:30 9:30 9:30 11:15 11:15 13:15 13:15 13:15	15:15 15:45
	TARG	9:15 9:30 9:35 10:00 10:15 11:45 11:45 12:45 13:15 13:45	15:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKROOT BSA

:			:									;		
1 1 1 1 1	OLUG GLUG	3.59 3.80 3.96 4.15 4.28		SLUC GLUC	0.01	0.34 0.46 0.73	1.02	1.93 2.23 2.53	3.02	3.58	3.72 3.92 3.96		CUM GLUC	0.01 0.18 0.29
NCSU=Yes	GLUC UTIL	0.37 0.41 0.33 0.37	NCSU=Yes	GLUC	0.62 0.31 0.43	0.56 0.48 0.55	0.59 0.63 0.56	0.62 0.60 0.59	0.50	0.37	0.28 0.24 0.08	NCSU=Yes	GLUC	0.69 0.68 0.44
	ADJ RESIS	33.1 34.2 34.8 34.9		ADJ RESIS	49.0 34.2 29.3	30.2 31.5 29.0	32.3 31.5 35.1	37.7 42.6 43.9	42.1	45.4 46.4 44.1	44.1 35.0 33.0 35.7	MEDVOL=511	ADJ RESIS	52.3 35.1 33.0
MEDVOL=483	ADJ FLOW	0.94 0.94 0.95 0.95	MEDVOL=573	ADJ FLOW	1.08	1.13	1.1	1.12	.1.9	27.7	1.13		ADJ FLOW	0.97 0.97 0.97
GROUP=E tOH	VRE- SIST	30.8 30.8 31.8 32.4 32.5	GROUP=E tOH	VRE- SIST	54.1 37.8 32.3	33.3 34.8 32.0	35.7 34.8 38.8	41.6	46.5	44.6	48.7 38.6 36.5 39.4	GROUP=No Topical	VRE- SIST	51.5 34.5 32.5
	LACT	1.11 0.94 1.09 0.98 1.30		LACT	0.25	0.90	0.99	0.95	98.0	1.01	1.08	GROUP=	LACT	0.07 0.26 0.77
DOSETIME=10:15	DEXT	0.958 0.951 0.974 0.962 0.996	DOSETIME=10:45	DEXT	0.879 1.010 0.962	0.920 0.956 0.939	0.901	0.903	0.957	1.020	1.050 1.050 1.100	DOSETIME=10:15	DEXT ROSV	0.810 0.835 0.930
	LACT	0.186 0.171 0.163 0.159 0.153		LACT	0.064	0.188 0.168 0.210	0.241	0.227	0.188	0.120	0.113 0.100 0.070 0.060	DOSETIM	LACT	0.024 0.080 0.156
FLAPWT=26.29 tinued)	DEXT ROSA	1.120 1.130 1.120 1.120	FLAPWT=22.99	DEXT	1.120	1.130	1.130	1.140	1.150	1.140	1.140	FLAPWT=26.68	DEXT	1.120 1.140 1.130
PHASE=2 FLAPWT (continued)	LACT	0.006 0.002 0.004 0.004	PHASE=2 FL	LACT	0.004	0.005	0.003	0.003	0.003	0.001	0.003		LACT	0.003 0.002 0.003
	MEAN	1.01		MEAN	0.98	1.02	1.01	2.00	888	20.0	1.02 1.02 0.99	PHASE=1	MEAN	0.99
.SIDE=96-45-6-L	MED	35.5 35.4 35.4 35.4	'SIDE=96-45-7-R	MED	35.5 36.2 35.6	35.9 35.7 35.7	35.9	35.9	35.9	3333	35.9 36.2 36.2	DE=96-47-7-R	MED	35.2 35.1 35.3
AL/SIDE	BP MEAN	33 33 33 33 33		BP MEAN	37 33	25 25 25 25 25 25 26 25 25 26 25 25 26 2	33 33	45 44 78	9 6 9	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	34 28	SIDE=90	BP MEAN	37 32
ANIM/	ART	7.4 7.4 7.4 7.4	ANIMAL,	ART MEDPH	4.4.4	7.7 7.4 7.4	4.7.	4.7.	7.7	4 4 4	7.4 7.4 7.4 7.4	ANIMAL/SI	ART Medph	7.4
1/11/96	HUMI DITY	26.5 28.5 29.0 29.2 27.0	DATE=01/17/96	HUMI	35.3	34.0 34.0 33.7	33.8 34.0 34.3	34.2	34.4	34.6	34.0 34.4 34.0		HUMI DITY	38.5 36.8 36.1
DATE=01/11/96 ANIMAL/	AIR	37.4 37.3 37.3 37.3 37.3	DATE=0	AIR TEMP	37.3 37.8 37.4	37.7 37.6 37.8	37.8 37.7 37.8	37.9 37.8 37.3	37.8	37.7	37.9 37.8 38.1 38.1	DATE=01/18/96	A1R TEMP	36.6 36.7 37.1
FLAPNO=2612	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPN0=2613	REL- TIME	-1.00	0.00	1.50	3.00	9.5	6.50	6.50 7.00 7.50 8.00		REL- TIME	-1.00 -0.75 -0.50
FLAP!	ACTL TIME	16:15 16:45 17:15 17:45 18:15	FLAPI	ACTL TIME	9:45 10:00 10:15	10:30 10:45 11:15	11:45 12:15 12:45	13:15	15:15	15:45 16:15 16:45	17:15 17:45 18:15 18:45	FLAPN0=2615	ACTL TIME	9:15 9:30 9:45
	TARG	16:15 16:45 17:15 17:45 18:15		TARG TIME	9:45	10:30 10:45 11:15	11:45 12:15 12:45	13:15	14:45	15:45 16:15 16:45	17:15 17:45 18:15 18:45		TARG TIME	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

 	GLUC	0.42	0.3	 8 :5.	1.36	1.55	1.75	1.90	2.00	2.12	2.25	2.32	2.41	2.50	2.62	2.73	2.84
NCSU=Yes	GLUC	0.52	0.41	0.38	0.42	0.40	0.39	0.30	0.20	0.25	0.20	0.20	0.18	0.18	0.22	0.22	0.22
MEDVOL=511	ADJ RESIS	29.6	24.4	31.6	30.9	35.5	33.9	42.7	32.5	35.7	38.2	37.8	38.0	36.0	37.8	37.6	36.6
	ADJ FLOW	0.98	0.98	0.98	0.97	0.98	0.97	96.0	0.98	0.98	0.99	0.98	0.97	9.	0.98	0.98	0.98
GROUP=No Topical	VRE- SIST	29.1	24.0	31.2	30.5	35.0	33.3	42.1	32.0	35.2	37.6	37.2	37.4	35.5	37.2	37.0	36.0
GROUP=N	LACT	0.63	0.94	 	26.0	96.0	0.0	1.10	1.33	1.02	1.07	1.04	1.18	1.13	0.93	1.05	1.01
DOSETIME=10:15	DEXT ROSV	0.918	0.946	0.971	0.951	0.964	0.964	0.995	1.040	1.020	1.040	1.050	1.060	1.050	1.040	1.030	1.020
DOSETIM	LACT	0.148	0.178	0.165	0.186	0.174	0.164	0.153	0.126	0.118	0.100	0.097	0.097	0.092	0.094	0.106	0.102
FLAPWT=26.68 continued)	DEXT	1.150	1.130	1.140	1.140	1.140	1.140	1.130	1.130	1.130	1.130	1.140	1.140	1.130	1.140	1.130	1.120
1 FLAPW (contin	LACT	0.003	0.005	0.00	0.002	0.005	0.00	0.004	900.0	900.0	0.004	0.003	0.003	0.002	0.001	0.001	0.001
PHASE=	MEAN	1.00	1.00	. 6.	0.99	1.00	0.99	0.98	1.00	1.00	1.01	1.00	0.99	1.02	1.00	.00	9.0
MAL/SIDE=96-47-7-R	MED	35.5	35.3	35.3	35.6	35.5	35.6	35.7	35.9	35.9	35.8	36.1	35.8	35.9	36.2	35.7	36.3
S1DE=96	BP MEAN	8,8	54	3 E	20	32	33	41	32	32	38	37	37	36	37	37	36
ANIMAL/	ART Medph	7.4	7.4	4.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
96/81	HUMI DITY	35.6	35.9	35.0	35.9	35.0	35.8	35.7	35.9	36.2	35.7	35.6	34.8	35.0	35.4	36.3	35.8
DATE=01/18/96	AIR TEMP	36.9	37.1	37.1	37.4	37.3	37.5	37.5	37.7	37.6	37.5	37.8	37.6	37.8	37.9	37.6	38.2
	REL- TIME	-0.25	0.50	.58	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAPN0=2615	ACTL TIME	10:00	10:45	11:15	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
1 1 1 1 1 1	TARG	10:00	10:45	11:15	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.01 0.20 0.30 0.35 0.35 0.35 1.38 1.38 1.38 1.38 2.25 2.25 2.25 2.35 3.38 3.38 MEDVOL=524 NCSU=Yes ADJ RESIS GROUP=E tOH 0.10 0.27 0.48 0.48 0.48 0.87 1.00 1.04 1.05 1.09 0.95 0.95 0.98 LACT DOSETIME=9:59 0.574 0.806 0.925 0.924 0.927 0.927 0.927 0.927 0.927 0.927 0.927 0.927 0.927 0.947 0.055 0.091 0.098 0.116 0.176 0.177 0.177 0.195 0.238 0.248 0.258 0.278 0.177 LACT FLAPWT=26.52 1.110 1.130 1.130 1.130 1.140 1.140 1.140 1.140 1.140 1.140 0.002 0.004 0.004 0.005 0.005 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 ANIMAL/SIDE=96-47-7-L PHASE=2 BP MEAN ART Medph DATE=01/18/96 FLAPN0=2616 -0.98 -0.73 -0.73 -0.23 -0.23 -0.23 -0.52 -0.53 REL-TIME 9:00 9:15 9:15 9:15 9:15 9:15 11:30 9:00 9:15 9:45 9:45 10:00 11:00 11:00 11:00 12:00 13:00 14:00 14:00 15:30 16:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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 	OLUC CUM CUM	3.59		GLUC CUM	0.01	0.60	1.00	1.26	1.52 7.67 7.	2.88	2.21	2.41	i ! !	CUM	0.01 0.19 0.36 0.47 0.56
NCSU=Yes	GLUC UT1L	0.42 0.40 0.31	NCSU=Yes	GLUC	1.16 0.78 0.45	0.30	0.37	0.30	0.22	0.25	0.19	0.17	NCSU=Yes -	GLUC	0.93 0.71 0.68 0.43 0.39
	ADJ RESIS	40.8 42.6 52.0	MEDVOL=516	ADJ RESIS	40.4 35.0 34.4	36.2 36.2 36.4 54.5	36.9	39.2 41.9	43.0 46.2	50.0	53.6	62.4		ADJ RESIS	55.7 33.6 31.9 34.4 30.3
MEDVOL=524	ADJ FLOW	1.00		ADJ FLOW	0.99	20.0	1.00	0.99	0.97	9.8	0.93	0.98	MEDVOL=566	ADJ FLOW	1.10
GROUP=EtOH M	VRE- SIST	41.2 43.0 52.5	GROUP=No Topical	VRE- SIST	40.2 34.8 34.2	36.0 36.0 36.2	36.7	39.0 41.6	42.8	49.8 51.3	53.3	62.0	GROUP=EtOH	VRE- SIST	60.7 36.6 34.8 37.6 33.0
	LACT	0.98	GROUP	LACT	0.08	0.60 1.10	5.0.	1.18	1.22	38.5	1.76	1.55		LACT	0.05 0.24 0.35 0.55
DOSETIME=9:59	DEXT ROSV	0.952 0.951 0.992	DOSETIME=10:15	DEXT ROSV	0.728	1.060	1.050	1.030	1.060	1.040	1.080	1.080	DOSETIME=10:00	DEXT ROSV	0.735 0.871 0.901 0.996
	LACT	0.189 0.173 0.136	DOSETIM	LACT	0.036	0.0070	0.108	0.122	0.155	0.127	0.143	0.095		LACT	0.020 0.070 0.096 0.098 0.110
FLAPWT=26.52 :inued)	DEXT	1.140 1.130 1.130	FLAPWT=21.77	DEXT	1.150	1.150	1.150	1.140	1.140	1.130	1.160	1.140	FLAPWT=23.76	DEXT	1.100 1.150 1.150 1.150
PHASE=2 FLAPWT (continued)	LACT	0.004		LACT	0.003	0.00	0.004	0.006	0.007	0.003	0.002	0.002	PHASE=2 FL	LACT	0.002 0.003 0.003 0.003
	MEAN	1.00	PHASE=1	MEAN	0.1.0	8008	1.01		0.98	20.0	268	.83		MEAN	1.01
SIDE=96-47-7-L	MED TEMP	35.7 35.7 35.4	:=96-50-10-R	MED	35.2 35.2	35.6 4.55.5 4.5.5	33.5	35.4	35.4	35.7	35.7	35.9	ANIMAL/SIDE=96-50-10-L	MED	35.1 35.3 35.3 35.3
	BP MEAN	41 43 52	1DE=96	BP MEAN	35	3 % % F	32 22	39,	<b>2</b> 4 4 6	2 22	23.23	£ 73	L/SIDE	BP MEAN	37 37 33 33
ANIM	ART Medph	7.4 7.4 7.4 7.4	ANIMAL/SIDE	ART Medph	7.4	4 4 4 4	7.4	7.7	7.4	7.7	7.4	7.4	ANIWA	ART MEDPH	44444
DATE=01/18/96 ANIMAL/	HUMI DITY	38.6 39.1 39.8		HUMI	36.6 35.9 35.2	3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	32.6	32.7 32.1	32.8 32.5 5	31.8	32.3	33.1	/24/96	HUMI DITY	38.7 35.8 34.2 32.8
DATE=0	A1R TEMP	36.5 36.5 36.5	DATE=01/24/96	A1R TEMP	36.7 36.7 36.8	37.1 37.1 37.1	37.1	37.2 37.2 37.2	37.2 37.2	37.2	37.2	37.1	DATE=01/24/96	AIR	36.0 36.6 37.1 37.0 37.1
FLAPN0=2616	REL- TIME	7.02 7.52 8.02		REL- TIME	-0.75	50.00	2.00	3.50	9.7.	5.50	2.80	8.00	FLAPN0=2618	REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAP	ACTL TIME	17:00 17:30 18:00	FLAPN0=2617	ACTL TIME	9:15 9:30 9:45	10:00 10:15 10:45	11:45	13:15 13:45	14:15	15:45	16:45	18:15	FLAPN	ACTL TIME	9:00 9:15 9:30 9:45
	TARG	17:00 17:30 18:00		TARG	9:15 9:30 9:45	10:00 10:15 10:45	11:45	13:15 13:45	14:15	15:45	16:45	17:45	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	9:00 9:15 9:30 9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

1 0 1 2 2 3	GLUC	0.71 1.07 1.107 1.26 1.89 2.25 2.25 2.25 2.25 3.10 3.26 3.26	CUM 6LUC 0.01 0.15 0.67 0.67 1.20 1.20 2.27 2.27 2.27 2.27 2.27 3.34 3.34
NCSU=Yes -	GLUC	0.30 0.36 0.35 0.40 0.42 0.33 0.33 0.33 0.33 0.33 0.33	0.55 0.55 0.55 0.55 0.35 0.35 0.55 0.55
	ADJ RESIS		# 10 m 10
MEDVOL=566	ADJ FLOW R	1.08 31.5 1.10 33.1 1.10 34.7 1.10 34.7 1.10 43.3 1.11 42.3 1.11 42.3 1.11 52.1 1.10 55.4 1.10 66.6 1.10 66.6	ADJ FLOW R 1.02 1.02 1.02 1.03 1.03 1.03 1.03 1.03
	VRE- SIST F		
GROUP=EtOH	S IS	ROUP	
	LACT	99999964966	
DOSETIME=10:00	DEXT ROSV	26 1.020 1. 49 1.010 1. 53 1.010 1. 54 0.983 1. 78 0.974 1. 80 0.979 1. 60 1.010 1. 56 0.990 1. 56 1.010 1. 44 1.020 1. 54 1.010 1. 55 1.010 1. 55 1.010 1.	DEXT ROSV 0.884 0.914 0.910 1.050 0.934 0.934 0.937 0.942 0.942 0.942 0.942 0.942 0.942 1.020 1.020 1.040 1.040
	LACT		
FLAPWT=23.76 tinued)	DEXT	1,140 0. 1,150 0. 1,150 0. 1,140 0. 1,140 0. 1,140 0. 1,140 0. 1,150 0. 1,150 0. 1,150 0.	DEXT ROSA 1.120 1.130 1.130 1.140 1.140 1.140 1.150 1.150 1.150 1.150 1.150 1.150
PHASE=2 FLAPWT (continued)	LACT	99 0.001 99 0.003 98 0.003 98 0.005 00 0.003 02 0.003 02 0.003 00 0.003 00 0.003 01 0.002 01 0.002 01 0.002	
	MEAN		
SIDE=96-50-10-L	MED	34 35.1 0.33 35.4 1.33 35.4 1.33 35.4 1.33 35.4 1.35 35.4 1.35 35.1 1.35 35.	TEMP 35.2 35.3 35.3 35.5 35.5 35.5 35.5 35.5
_	BP MEAN		Σ Σ
AN I MAL	ART Medph	AN I MAL	MEDPH PH P
124/96	HUMI DITY	25.75 20.05	HUMI D1174 29.12 33.15 33.15 33.16 3
DATE=01/24/96	AIR	37.2 31.9 37.4 31.1 37.5 31.1 37.6 31.1 37.6 31.1 37.3 30.9 37.1 31.1 37.0 30.5 36.9 30.8 37.1 29.5 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3	AIR 16MP 16MP 16MP 17MP 17MP 17MP 17MP 17MP 17MP 17MP 17
FLAPN0=2618	REL- TIME	30 0.50 30 1.50 30 1.50 30 2.50 30 2.50 30 4.50 30 4.50 30 6.50 30 6.50 30 6.50 30 7.50 30 8.00	TIME 11 ME 1
FLAPA	ACTL TIME	10:30 11:00 11:30 12:30 13:00 14:30 14:30 15:30 16:30 17:30	ACTL TIME 9:15 9:30 9:45 10:15 11:45 11:45 12:45 12:45 14:45 16:15 16:15 17:15
	TARG	10:30 11:30 12:30 12:30 14:30 14:30 16:30 17:30 17:30 17:30 17:30 17:30	TARG 11 ME 2 9 9 15 15 15 15 15 15 15 15 15 15 15 15 15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

•			•																			:							
	CUM	3.50		OLUC	0.01	0.21	0.56	0.74	1.15	2.05	2.54	2.89	3.22	3.76	3.97	4.16	4.36	4.56	<b>4.</b> 7	7.7	5.12		CUM		0.20	0.39	0.80	1.20	
NCSU=Yes	פרחכ חבור	0.28	NCSU=Yes	GLUC	0.84	0.79	0.71	9.76	0.81	93	26.0	0.71	99.0	0.45	0.42	0.39	0.41	0.38	0.50	200	0.27	NCSU=Yes	GLUC UTIL	7.	0.3	0.77	0.82	0.80 0.80	
	ADJ RESIS	45.1	MEDVOL=507	ADJ RESIS	38.1	36.3	36.7	37.7	39.1	41.6	44.6	61.4	55.7	56.4	63.0	61.3	62.1	63.2	0.4°	 	? .	MEDVOL=463	ADJ RESIS	0 07	42.1	36.8	35.7	35.5 36.4	
MEDVOL=530	ADJ FLOW	1.04		ADJ FLOW	26.0	0.99	0.98	0.98	0.97	6.0	0.99	0.98	8.8	0.99	0.95	96.0	0.98	9.0	200	70.0	0.98		ADJ FLOW	9	0.88	0.90	.8	0.90 0.88	
GROUP=E tOH	VRE- SIST	46.1	GROUP=No Topical	VRE- SIST	37.2	35.5	35.8	36.8	38.2	40.6	43.6	0.09	54.5	55.1	61.5	59.9	2.09	61.8	62.1	. 09	: . }	GROUP=No Topical	VRE- SIST	7,	37.6	32.8	31.8	31.7 32.5	
	LACT	1.31	GROUP=I	LACT DEXT	0.38	0.62	0.88	0.91	0.95	0.98	0.94	0.93	0.95	1.01	1.06	1.06	0.9	98.0		7 .	0.98	GROUP=	LACT	71	0.43	0.69	0.87	0.98 1.01	
DOSETIME=10:15	DEXT	0.974	=10:00	DEXT ROSV	0.814	0.857	0.883	0.865	0.843	0.796	0.781	0.861	0.892	0.962	0.973	0.997	0.982	0.983	. 000 200	200	1.030	E=10:30	DEXT ROSV	800	0.828	0.834	0.815	0.815	
6 DOSE1	LACT	0.149	DOSETIME=10:00	LACT	0.122	0.181	0.232	0.255	0.287	0.336	0.336	0.257	0.234	0.177	0.174	0.159	0.157	0.143	0.145 0.145		0.104	DOSETIME=10:30	LACT ATEV	0.037	0.137	0.222	0.296	0.326	
FLAPWT=23.06 :inued)	DEXT ROSA	1.080	FLAPWT=21.86	DEXT	1.120	1.140	1.140	1.140	1.140	1.130	1.130	1.120	1.130	1.130	1.130	1.140	1.130	1.120	1.150	1.150	1.130	FLAPWT=24.64	DEXT ROSA	1 130	1.140	1.150	1.150	1.140 1.140	
	LACT ATEA	0.010	FLAPWT	LACT	0.005	0.005	0.007	9000	0.005	0.00	0.007	0.017	600.0	0.007	0.008	200.0	0.010	0.009	) 00.00	010	0.008		LACT	200 0	0.004	0.003	0.004	0.007	
PHAS	MEAN	1.02	PHASE=1	MEAN		7.02																PHASE=1	MEAN					1.01 0.99	
ANIMAL/SIDE=96-49-12-R	MED	35.5	E=96-49-12-L	MED	34.2	24°-7	34.9	35.1	35.1	35.1	35.2	35.2	35.1 35.1	35.2	35.3	35.3	34.9	35.0	35.U	 	35.8	DE=96-46-8-R	MED TEMP	35.8	35.4	35.6	35.5	35.7 35.7	
/SIDE=9	BP MEAN	25	)E=96-4	BP MEAN	37	% % % ?	36	37	38	4 <del>,</del>	77	09	2 22	24	09	26		63	<b>4</b> 7	5 %	<b>3</b> '		BP MEAN	27	3,	13 13 13 13 13 13 13 13 13 13 13 13 13 1	325	35 35	
ANIMAL,	ART MEDPH	7.4	ANIMAL/SID	ART MEDPH	7.4	7.4	7.4	7.4	4.V	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	4.7	. · ·	: .	ANIMAL/SI	ART Medph	7 2	7.4	7.4	7.4	7.4	
25/96	HUMI	32.5		HUMI	31.1	20.5	32.4	29.1	28.4	31.4	31.3	31.7	31.5	32.0	31.8	29.1	31.7	31.3	31.1		30.0		HUMI DITY	21.2	31.4	29.9	32.2	33.1 27.8	
DATE=01/25/96	AIR TEMP	37.3	DATE=01/25/96	AIR TEMP	35.7	36.2 36.3	36.4	36.5	36.7	36.7	36.8	36.8	36.8 36.8	37.1	36.8	36.7	36.6	36.6	2 Y	2 4	36.9	DATE=01/31/96	AIR TEMP	3,6	36.6	36.8 36.8	36.9	36.9 36.9	
	REL- TIME	8.00		REL- TIME	-1.00	-0.75	-0.25	9.6	0.50	.50	2.00	2.50	3.00	6.0	4.50	2.00	2.50	<b>9.</b>	0.0	8.5	7.75		REL- TIME	-1-00	-0.75	-0.50	0.0	0.50 1.00	
- FLAPNO=2619	ACTL TIME	18:15	FLAPNO=2620	ACTL TIME	00:6	9:15 9:30	9:45	10:00	10:30	11:30	12:00	12:30	13:00	14:00	14:30	15:00	15:30	16:00	17:00	17.30	17:45	FLAPN0=2621	ACTL TIME	0.30	9:45	10:00	10:30	11:00 11:30	
6 9 9 8 8 8 8 8 8 8	TARG	18:15		TARG	6:00	9:15 9:30			10:30	11:30	12:00	12:30	13:00			15:00	15:30	16:00			18:00	• · · · · · · · · · · · · · · · · · · ·	TARG	05.0				11:00	

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	2.37	3.09	3.76	4.47	5.02	5.57	6.05
NCSU=Yes	פרחכ עדור	0.81 0.73	0.68	0.67	0.69	0.56	0.57	0.44
MEDVOL=463	ADJ RESIS	38.5	44.6 46.0	46.2 41.3	51.7	46.2 49.4	50.3	52.6
	ADJ FLOW	0.98	0.80	0.89	0.87	0.89	0.87	0.87
GROUP≕No Topical	VRE- SIST	34.3	39.8	41.2 36.8	46.2	41.2	44.9	6.9
GROUP=N	LACT	0.93	9.0	0.97	0.96	0.95	0.97	1.02
E=10:30	DEXT	0.794	0.862 0.862 0.862	0.852	0.840	0.897	0.901	0.935
DOSETIME=10:30	LACT	0.354	0.275	0.278	0.285	0.230	0.241	0.198
FLAPWT=24.64 continued)	DEXT ROSA	1.130	1.140	1.130	1.130	1.130	1.140	1.13
1 FLAPW (contin	LACT	0.007	0.00	0.007	0.008	0.009	0.00	0.010
PHASE=	MEAN	1.02	5.5	9.5	0.98	1.00	0.98	0.98
IMAL/SIDE=96-46-8-R	MED	35.7	3 55 55 5 80 80	35.8 35.8	35.8 35.9	35.9	35.9	35.9
SIDE=9	BP MEAN	34 40 40	3 4	41	<b>4</b> 5	<del>4</del> 1	7,4	<b>4</b> 4
ANIMAL/	ART Medph	7.4	7.7	7.4	7.4	7.4	7.4	7.5
11/96	HUMI	32.2	32.6	31.7	32.0 31.2	27.4 26.0	31.7	30.1
DATE=01/31/96	AIR	36.9	37.0	37.1 37.0	37.0 37.1	37.1 37.0	37.0	37.1
	REL- TIME	2.00	 	4.00	5.00	6.50	7.00	8.00
FLAPN0=2621	ACTL TIME	12:00	13:30	14:30	15:30	16:30	17:30	18:30
	TARG	12:30	13:30	14:30	15:30	16:30	17:30	18:30

0.63 0.56 0.67 0.67 0.77 0.72 0.72 0.73 0.68 0.68 0.69 0.69 MEDVOL=574 NCSU=Yes 46.6 46.7 336.5 336.5 336.5 336.5 441.0 441.0 45.9 45.9 740.7 76.0 76.0 ADJ RESIS ADJ FLOW DATE=01/31/96 ANIMAL/SIDE=96-46-8-L PHASE=2 FLAPWT=22.75 DOSETIME=10:15 GROUP=EtOH 51.5 4.65.0 4.66.0 4.67.4 4.67.0 50.0 50.0 65.0 65.0 65.0 83.0 83.0 84.0 0.38 0.97 0.97 0.97 0.97 0.98 0.98 0.99 0.99 0.99 0.99 LACT 0.873 0.926 0.926 0.875 0.857 0.854 0.854 0.854 0.854 0.854 0.858 0.854 0.858 0.854 0.859 0.890 0.890 DEXT ROSV 0.094 0.163 0.234 0.276 0.277 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 0.278 LACT 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 0.003 0.004 0.004 0.005 0.005 0.005 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 LACT BP MEAN ART MEDPH HUMI DITY 36.7 356.6 356.6 356.6 356.6 356.8 366.8 3 AIR TEMP ----- FLAPNO=2622 -1.00 -0.75 -0.55 REL-TIME 9:15 9:30 9:30 10:00 11:15 11:15 12:45 14:15 14:15 15:15 16:15 17: ACTL TIME 9:15 9:30 9:30 11:15 11:15 11:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 13:15 14:15 14:15 14:15 15:

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	0.01	0.54 0.76 1.23	2.29	3.46	09.4	5.57	6.61	7.04	8.02	8.49	٥.۶		OU CUM	0.01	0.16	25.0	0.69	1.1 1.1	2.05	2.58	6.5	3.77	4.10	4.57 4.58	4.96
NCSU=Yes	GLUC UTIL	1.06	0.78 0.86 0.95	0.98	1.15	1.07	0.99	. 6	9.86	0.95	0.97	*.°	NCSU=Yes	GLUC UT1L	0.61	0.62	9 0	0.78	0.85	86.0	1.07	0.82	0.73	99.0	55.0 55.0	0.57
MEDVOL=534	ADJ RESIS	98.6 51.7 44.0	41.7 40.0 38.9	39.7	39.7	48.4	52.9	59.5	9.09	61.2	61.0	93.5	667=	ADJ RESIS	45.6	36.2	, 6 , 0	30.3	35.2	32.0	39.6	55.5	63.4	6.6.9	 % %	74.7
	ADJ FLOW	1.03	1.02 1.02 1.03	1.02	20.1	1.03	1.04		1.02		1.05	<u>.</u>	MEDVOL	ADJ FLOW	0.96	0.97	0.0	0.9	0.9	0.97	0.0	76.0	0.95	0.94	2 2 8 8	0.94
GROUP≕No Topical	VRE- SIST	101.5 53.2 45.2	42.9 41.2 40.0	40.8 38.2	60.8 40.8 78.0	49.8	54.5	6.09	62.3	63.0	62.7	0.00	GROUP=E tOH	VRE- SIST	41.0	34.8	20.0	29.1	33.8	33.7	38.0	53.7	6.09	64.3	۰ ۲ ۲ ۵	71.8
GROUP=	LACT	0.38 0.78 1.02	1.00 9.38	0.95	0.9	0.97	0.95	0.93	1.13	1.07	0.97	0.70		LACT	0.34	9.0	2.5	1.01	1.01	0.98	0.96	) O	0.90	0.95	- c	6.0
DOSETIME=10:15	DEXT	0.759	0.854 0.833 0.805	0.788	0.740	0.778	0.793	0.782	0.842	0.804	0.803		DOSETIME=10:00	DEXT ROSV	0.905	914	9,00	0.834	0.805	0.780	0.744	0.830	0.860	0.872	0.435	0.895
DOSETI	LACT ATEV	0.136	0.270 0.300 0.314	0.345	0.375	0.352	0.322	0.321	0.336	0.350	0.316	0000	90.	LACT	0.077	0.151	0.50	0.283	0.313	0.342	0.364	0.27	0.250	0.241	0.20 0.215	0.220
FLAPWT=19.93	DEXT	1.110	1.120	1.120	1.130	1.130	1.120	1.120	1.130	1.120	1.120	1.120	FLAPWT=21	DEXT ROSA	1.120	1.150	1.150	1.110	1.10	1.120	1.13	1.10	1.120	1.10	155	1.100
	LACT	0.004	0.005	0.007	0.008	0.009	0.012	0.008	0.010	0.011	0.007	6,000	PHASE=2 F	LACT	0.004	0.00	0.00	0.005	9000	0.010	0.011	0.014	0.015	0.016	0.0	0.017
PHASE=1	MEAN	1.02	9.0.0	0.08	. 0 -	1.0	1.0	0.9	9.5	. 6	1.02	70-1	5-L PH	MEAN	1.00	5.5		1.00	0.98	1.0	1.03	5 6	0.99	0.98	- <b>-</b>	0.98
6-51-5-R	MED	34.7	34.7 34.7 34.8	34.8 34.8	34.7	34.7	34.7	34.8	34.8 27.8	34.8	34.8	o. •	NIMAL/SIDE=96-51-	MED	34.2	٠, ٠,	35.0	35.3	35.5 45.5	35.5	35.6	35.7	35.7	35.8	35.7	35.7
'SIDE=9	BP MEAN	102 54 45	7 7 7 7 7 7 9	38	G 9 84	22 22	ις γ	8	3 2	8 8	3 3	8	IAL/SID	BP MEAN	14:	3 6	0 0	8	13 13 13 13 13 13 13 13 13 13 13 13 13 1	34	33	<u>.</u> 72	9	63	8 %	} ₽
ANIMAL/	ART Medph	7.7	4.7. 4.4. 4.7.	4.7	4.7.	7.4	7.4	7.4	7.4	7:7	7.4	•	⋖	ART Medph	7.4	4.	7.7	7.4	7.4	7.7	7.4	4.7	7.4	7.4	4.7	7.4
	HUMI DITY	29.9 30.2 27.5	27.1 27.2 29.2	29.2	25.2 25.8	26.0 25.8	29.5	27.7	28.5	27.4	26.7	61.3	DATE=02/01/96	HUMI DITY	29.3	9 6	29.7	28.0	«	30.5	30.4	29.6	30.0	28.4	28.6 28.8	30.0
DATE=02/01/96	AIR TEMP	38.23	36.4 36.4 36.4	36.5	36.5	36.5	36.5	36.6	36.6 76.6	36.6	36.6	9.00	DATE=(	AIR	35.0	26.0	36.4	36.7	36.8 36.8	37.0	37.0	37.0	37.6	37.5	37.0	37.1
	REL- TIME	-1.02 -0.75 -0.50	0.09 0.50 0.50	2.50	 	3.50	4.50	5.50	6.00	2.00	7.48	9.00	FLAPN0=2624	REL- TIME	-1.00	٠. د د	-0.5	0.00	0.50	1.50	2.8	3.00	3.50	6.0	. v.	5.50
FLAPN0=2623	ACTL TIME	9:14 9:30 9:45	10:00 10:15 10:45	11:15	12:45	13:45	14:45	15:45	16:15	17:15	17:44	<u></u>	FLAF	ACTL TIME	9:00	7. C	05:4	10:00	10:30	11:30	12:00	13:00	13:30	14:00	15:00	15:30
	TARG TIME	9:15 9:30 9:45	10:00 10:15 10:45	11:15	12:45	13:45	14:45	15:45	16:15	17:15	17:45	C1:01		TARG TIME	6:00	9:15	57:6	10:00	10:30	11:30	12:00	13:00	13:30	14:00	15:00	15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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	SLUC	5.26 5.51 5.81 6.17 6.50		SLUC MUD	0.01	0.50	1.32	2.49	3.49 8.49	4.15	4.77 5.08	5.37	5.96 6.26		CUN	0.01 0.14 0.28
NCSU=Yes	GLUC	0.58 0.51 0.60 0.71 0.67	NCSU=Yes .	GLUC UT IL	1.04	0.80	0.82	0.67	0.61	0.70	0.64	0.59	0.56	NCSU=Yes	GLUC	0.64 0.56 0.52
	ADJ RESIS	72.5 66.9 68.0 72.4 70.7	MEDVOL=439	ADJ RESIS	91.5 66.4	61.7 61.8 53.8	56.4 52.4 54.3	54.3	57.0 56.4 57.0	65.3	65.0 65.0	76.8 81.2	71.3 81.6	MEDVOL=560	ADJ RESIS	70.2 56.3 52.3
MEDVOL=499	ADJ FLOW	0.95 0.97 0.98 0.98		ADJ FLOW	0.84	0.86 0.84 0.85	0.83	0.83	0.84 0.83 78	0.83	0.84	0.85	0.84	HD MED	ADJ FLOW	1.08
GROUP=EtOH	VRE- SIST	69.7 64.4 65.3 69.6 68.0	GROUP=3 mg HD	VRE- SIST	77.4	52.2 52.3 45.5	44.3	45.9	48.2	51.0	56.6 55.0	65.0 68.7	60.3 69.0	GROUP=3 mg H	VRE- SIST	75.8 60.7 56.4
	LACT	0.96 1.23 1.00 0.86 0.94		LACT	0.10	0.54 0.76 0.84	0.94 0.91	0.93	0.92 1.02 1.05	0.88	0.88	0.92	0.90		LACT	0.31 0.53 0.78
DOSETIME=10:00	DEXT	0.893 0.932 0.912 0.875 0.878	DOSETIME=9:58	DEXT	0.732	0.794	0.812 0.829 0.826	0.817	0.825	0.862	0.852	0.877	0.868	DOSETIME=10:15	DEXT ROSV	0.811 0.858 0.867
	LACT	0.219 0.237 0.226 0.232 0.238		LACT ATEV	0.049	0.268 0.304	0.307 0.326 0.326	0.310	0.297	0.285	0.261	0.249	0.234		LACT	0.102 0.150 0.206
APWT=21.( ued)	DEXT	1.100 1.120 1.120 1.120	FLAPWT=25.75	DEXT	1.180	1.140	1.180	1.140	1.130	1.170	1.130	1.130	1.110	FLAPWT=30.38	DEXT	1.140 1.140 1.130
PHASE=2 FLAPWT=21.06 (continued)	LACT	0.020 0.018 0.019 0.021 0.021		LACT ATEA	0.002	0.005	0.006	0.008	0.007	0.014	0.015	0.015	0.017		LACT	0.000
	MEAN	1.01 1.01 1.02 1.02	-L PHASE=2	MEAN	1.02	20.1	0.99	0.98	2.69	0.98	1.00	9.5	9.6	-R PHASE=2	MEAN	1.01
/SIDE=96-51-5-L	MED	35.7 35.8 35.8 35.8	ANIMAL/SIDE=96-128-5-L	MED	34.5	35.7 35.7 35.6	35.6 35.7	35.9	33.50	35.9	36.1	36.1 36.2	36.2 36.2	SIDE=96-128-4-R	MED	35.1 34.8 34.6
	BP	69 65 71 69	/SIDE=9	BP MEAN	22	£ 23 3	43 42	42	8 <sub>7</sub> 2 <sub>7</sub>	52 52	25 52	69	09 69	/SIDE=9	BP MEAN	75 57
ANIMAL	ART MEDPH	7.7.7.7.7.7.7.4.7.7.7.7.7.7.7.7.7.7.7.7	ANIMAL	ART MEDPH	7.4	4 4 4	4.4.4	7.4	4.7.7	7.4	7.4	7.4	7.4	AN I MAL/	ART MEDPH	7.4
DATE=02/01/96	HUMI DITY	29.9 29.5 24.6 27.8 30.1	96/20	HUMI DITY	33.3	34.5 34.5 34.5	34.0 34.0	33.0 33.3	33.8 33.8 1	34.2	33.9	33.8 33.7	33.8 33.9	96/80.	HUMI DITY	40.2 40.3 39.5
DATE=0	AIR	37.1 37.0 37.1 37.0 37.1	DATE=02/07/96	AIR	35.3	36.7 36.7	36.7 37.0 37.0	37.1 37.1	37.0 37.1 37.1	37.0 37.2	37.2 37.1	37.2 37.2	37.3 37.3	DATE=02/08/96	AIR TEMP	35.8 35.6 35.2
FLAPN0=2624	REL- TIME	6.00 6.50 7.00 7.50 8.00		REL - TIME	-0.97	0.02	1.03	2.53	3.53	5.03	5.53 6.03	6.53 7.03	7.53 8.03		REL- TIME	-1.00 -0.77 -0.50
FLAP	ACTL TIME	16:00 16:30 17:00 17:30	FLAPN0=2626	ACTL TIME	9:00	9:45 9:45 9:58	10:30 11:00 13:30	12:00	13:00 13:30 14:00	14:30 15:00	15:30	16:30 17:00	17:30 18:00	. FLAPNO=2627	ACTL TIME	9:15 9:29 9:45
	TARG	16:00 16:30 17:00 17:30 18:00		TARG TIME	9:00	9:50 9:45 10:00	10:30 11:00 11:30	12:00	13:00 13:30	14:30	15:30 16:00	16:30 17:00	17:30 18:00		TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

6 0 4 1 1 1	CUM	2015	0.44	0.61	76.0	1.29	1.63	1.96	2.27	2.56	2.84	3.10	3,33	3.55	3.76	4.01	4.18	4.39	79.4	4.87
NCSU=Yes	OLUC	UTIL	0.63	29.0	99.0	0.71	0.68	0.65	0.62	0.57	0.57	0.52	97.0	0.43	0.43	67.0	0.34	0.43	0.44	0.50
MEDVOL=560	ADJ	RESIS	53.0	45.2	45.4	42.6	50.3	51.9	59.6	8.99	2.99	68.8	64.2	72.2	9.69	2.99	72.7	75.8	77.0	73.6
_	ADJ	FLOW	1.06	1.08	1.06	1.05	1.07	1.08	1.07	1.06	1.08	1.09	1.09	1.05	1.06	1.08	1.07	1.07	1.05	1.07
GROUP=3 mg HD	VRE-	SIST	57.1	8.8	49.0	49.5	54.3	56.0	64.3	72.1	72.0	74.3	69.3	77.9	75.1	72.0	78.4	81.8	83.1	79.4
_	LACT	DEXT	0.77	0.86	0.91	0.89	0.93	0.94	96.0	0.97	0.88	0.88	0.93	96.0	0.93	0.83	1.16	0.97	0.99	0.00
DOSETIME=10:15	DEXT	ROSV	0.824	0.820	0.820	0.782	0.803	0.809	0.833	9,8,0	0.862	0.869	0.917	0.937	0.929	0.901	0.925	0.911	0.909	0.894
	LACT	ATEV	0.252	0.291	0.310	0.330	0.327	0.318	0.310	0.289	0.258	0.233	0.221	0.217	0.209	0.210	0.207	0.215	0.232	0.234
FLAPWT=30.38 itinued)	DEXT	ROSA	1.150	1.160	1.160	1.150	1.150	1.140	1.150	1.140	1.150	1.130	1.150	1.160	1.150	1.150	1.100	1.130	1.140	1.150
PHASE=2 FLAPWT: (continued	LACT	ATEA	00.00	0.00	0.00	0.003	0.004	900.0	0.005	0.004	0.004	0.003	0.005	0.002	0.003	0.004	0.004	0.003	0.004	0.004
	MEAN	FLOW	0.98	1.0	0.98	0.98	9.	9.0	.00	0.99	.0	1.0		0.98	0.0	.08	.0	0.9	0.98	1.00
ANIMAL/SIDE=96-128-4-R	Æ	TEMP	34.6	34.4	34.3	34.6	34.6	34.8	34.9	35.1	35.2	35.1	35.2	35.1	35.2	35.2	35.2	35.2	35.2	35.2
/SIDE=	8	MEAN	26	65	48	48	24	26	79	7	22	23	2	2	7,2	22	82	8	8	8
ANIMAL	ART	MEDPH	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
96/80	HUMI	DITY	39.4	40.1	40.4	40.5	40.6	40.2	40.3	39.6	39.1	39.0	39.0	38.6	37.4	37.3	37.0	37.3	36.9	36.6
DATE=02/08/96	AIR	TEMP	35.1	35.0	35.2	34.3	35.0	35.2	35.2	35.5	35.7	35.6	35.7	35.7	35.7	35.7	35.8	35.7	35.7	35.7
	REL-	TIME	-0.25	0.0	0.50	9.	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAPNO=2627	ACTL	TIME	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	TIME	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

! ! ! !	CUM	0.01	0.58 0.80 1.27	1.74	2.65 2.98 3.36	3.71 4.03 4.33	4.60 4.87 5.16 5.42
NCSU=Yes	GLUC UTIL	0.81 0.72 0.74	0.80 0.88 0.94	0.95	0.83 0.67 0.76	0.70 0.64 0.69	0.55 0.54 0.57 0.52
L=513	ADJ RESIS	37.4 32.5 31.8	30.5 30.1 29.5	29.3	33.4 39.0 39.7	44.9 45.5 47.8	53.5 53.9 57.7 62.7
MEDVOL=513	ADJ FLOW	0.99	0.98 0.98 0.98	1.01	0.99	0.99	0.95
GROUP=EtOH	VRE- SIST	37.0 32.2 31.5	30.2 29.7 29.1	29.0 31.4	33.0 38.6 39.2	44.3 45.0 47.2	52.8 53.3 57.0 62.0
	LACT	0.50 0.76 0.87	0.99	0.98	9.5%	0.98	0.95 0.97 0.96 1.04
DOSETIME=10:00	DEXT ROSV	0.752 0.829 0.808	0.788	0.732	0.775 0.839 0.824	0.847 0.857 0.874	0.886 0.906 0.905 0.919
	LACT ATEV	0.173 0.242 0.285	0.315 0.372 0.387	0.400	0.342 0.281 0.299	0.292	0.237 0.231 0.237 0.237
FLAPWT=25.65	DEXT	1.100	1.130	1.140	1.130	1.140	1.130 1.140 1.150
PHASE=2 FI	LACT	0.000	0.004	0.000	0.008 0.007 0.006	0.006 0.005 0.006	0.005 0.003 0.002 0.002
	MEAN	0.1.0	8.5.8	1.00	- <b>.</b>	2.6.6	0.97 1.00 1.00
NIMAL/SIDE=96-128-4-L	MED	35.4 35.4 35.3	35.2 35.3 34.9	34.9 34.9	35.1 35.1	35.4 35.4 35.4	35.4 35.4 35.4
L/SIDE:	BP MEAN	37 31	888	88	3 33 33	<b>42</b> 42	53 24 29
ANIWA	ART MEDPH	7.4 7.4 7.4	7.5	7.4 7.4	4.7.4.	7.7.	7.4
DATE=02/08/96	HUMI DITY	32.5 32.4 33.4	32.7 33.3 34.2	34.2	34.2 33.6 33.6	33.6 33.6 32.9	33.9 33.1 32.6 32.8
DATE=0	AIR TEMP	36.7 37.1 36.9	36.9 36.7 36.8	36.7	36.8 37.0 37.0	37.1 37.1 37.1	37.1 37.1 37.1 37.1
FLAPN0=2628	REL- TIME	-1.00 -0.75 -0.50	0.00	1.00	3.50 3.50	3.50 4.00 50	5.00 5.50 6.00
- FLAPI	ACTL TIME	9:00 9:15 9:30	9:45 10:00 10:30	11:00	12:00 12:30 13:00	13:30 14:00 14:30	15:00 15:30 16:00 16:30
	TARG	9:00 9:15 9:30	9:45 10:00 10:30	11:00	12:00 12:30 13:00	13:30 14:00 14:30	15:00 15:30 16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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t t t t	GLUC CUM	5.68 5.94 6.20		CUM	0.01 0.18 0.36	0.56	1.57	2.20	2.81	3.30	3.50	3.90	4.07	77.7	4.58		CUM	0.01 0.20 0.42 0.65
NCSU=Yes	GLUC	0.52 0.51 0.54	NCSU=Yes	GLUC	0.79 0.67 0.72	0.83	0.83	0.56	0.58	0.45	0.40	0.41	0.35	0.35	0.28	NCSU=Yes -	GLUC UT 1L	0.63 0.77 0.88 0.93
	ADJ RESIS	64.8 68.8 69.8	MEDVOL=536 P	ADJ RESIS	46.0 42.1 40.5	37.2	37.0 45.3	55.5	20.7	6.4.0	67.1 62.7	59.8	65.2	58.0	61.2 51.4		ADJ RESIS	49.8 45.8 43.2 36.3
MEDVOL=513	ADJ FLOW	0.99	MEDVO	ADJ FLOW	1.02	 	1.03	1.03	1.05	3.5	5.03	2.03	5.03	1.02	1.00	MEDVOL=529	ADJ FLOW	1.00
GROUP=E tOH	VRE- SIST	64.0 68.0 69.0	GROUP=3 mg HD	VRE- SIST	47.5 43.4 41.8	41.2 38.4 27.4	38.2	57.3	93.4	7.99	69.3 64.7	61.8	67.3	26.6	63.2 53.1	GROUP=E tOH	VRE- SIST	50.8 46.7 43.7 44.0 37.0
	LACT	0.95 0.94 0.93		LACT	0.42 0.75 0.86	0.91	0.90	1.04	6.0	0.95	1.03	0.91	- 08 9.0	0.99	1.21 0.88		LACT	0.62 0.69 0.83 0.90
DOSETIME=10:00	DEXT ROSV	0.910 0.902 0.911	DOSETIME=10:15	DEXT	0.801 0.847 0.822	0.783	0.786	0.864	0.883	0.940	0.956	0.974	0.989	0.986	0.983	DOSETIME=10:30	DEXT	0.825 0.816 0.769 0.741 0.729
	LACT	0.213 0.209 0.213		LACT	0.148 0.224 0.277	0.329	0.332	0.260	0.256	0.193	0.186	0.162	0.164	0.157	0.163		LACT	0.174 0.234 0.319 0.366 0.392
FLAPWT=25.65 tinued)	DEXT	1.130 1.120 1.140	FLAPWT=26.12	DEXT	1.150 1.140 1.140	1.140	1.150	1.110	1.140	1.140	1.130	1.150	1.140	1.140	1.10	FLAPWT=25.66	DEXT	1.100 1.150 1.150 1.140
PHASE=2 FLAPWT (continued)	LACT	0.005 0.004 0.001		LACT	0.003	0.001	0.005	0.005	0.002	0.003	0.006	0.002	0.004	0.005	0.009	PHASE=2 FL	LACT	0.004 0.003 0.005 0.005
	MEAN	1.00	R PHASE=2	MEAN	0.99	20.5	8.5	9.0	0.9	0.98	9.6	1.02	- c 8 8	0.99	0.98		MEAN	0.99
SIDE=96-128-4-L	MED	35.5 35.5 35.5	ANIMAL/SIDE=96-56-5-R	MED	35.1 35.1 35.0	35.1 85.1	34.4 3.6.6.	34.9	35.1	33.5	% % 	35.1	35.1	35.1	35.3	/SIDE=96-56-5-L	MED	34.8 35.9 35.4 35.4
L/SIDE:	BP MEAN	68 68 69	/SIDE=9	BP MEAN	47 43 41	24 65 g	38 7	57 93	22	5 79	% %	<b>5</b> 3 i	<b>2</b> 9	263	52		BP MEAN	50 44 37
AN IMAL/	ART MEDPH	7.4 7.4 7.4	ANIMAL	ART MEDPH	7.4	4.7.	7.7	7.4	7.4	7.4	7.4	7.4	7.7	7.4	7.4	ANIMAL	ART MEDPH	44444
96/80/	HUMI	32.9 32.7 32.7	14/96	HUMI DITY	33.0 33.1 32.8	32.0 32.0	32.4 32.0	32.2 32.2	31.6	31.7	31.9 31.9	31.0	31.7	31.5	31.4	DATE=02/14/96	HUMI DITY	31.5 32.0 31.7 30.4 29.8
DATE=02/08/96	AIR TEMP	37.1 37.1 37.2	DATE=02/14/96	AIR	36.3 36.6 37.7	36.8 36.8	36.7	36.7 36.7	36.7	37.0	36.9 36.9	36.9	36.9	37.0	37.0	DATE=0	AIR TEMP	36.1 37.2 37.1 37.3 37.8
FLAPN0=2628	REL- TIME	7.00		REL- TIME	-1.00	9.00	1.00	2.50	3.00	. 8	5.50 5.90	5.50	6.50	7.00	8.00	FLAPNO=2630	REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAPN	ACTL TIME	17:00 17:30 18:00	- FLAPNO=2629	ACTL TIME	9:15 9:30 9:45	10:00 10:15	11:15	12:15 12:45	13:15	14:15	14:45 15:15	15:45	16:15	17:15	17:45 18:15	FLAP	ACTL TIME	9:30 9:45 10:00 10:15
	TARG	17:00 17:30 18:00		TARG	9:15 9:30 9:45	10:00 10:15	11:15	12:15 12:45	13:15	14:15	14:45 15:15	15:45	16:15	17:15	16:45		TARG	9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	OUN CUM	1.38 1.85 2.31 2.75 3.21	3.56 3.91 4.20 4.75 4.75	5.19 5.37 5.55 5.71 5.89	CUM 6LUC 0.35 0.35 1.30 1.30 1.30 1.30 1.30 2.57 2.57 2.50 4.06 4.06 5.35	6.29
NCSU=Yes	GLUC	0.98 0.94 0.91 0.88	0.70 0.69 0.58 0.58 0.51	0.40 0.37 0.32 0.36 0.36	0.05 0.65 0.65 0.65 0.65 0.65 0.65 0.65	96.0
	ADJ RESIS	38.3 34.5 41.8 53.2	54.9 53.0 49.8 49.3 51.9	.01 55.5 .99 61.4 .01 60.5 .99 60.4 .00 61.8	RESIS 87.2 62.6 63.8 63.8 64.1 74.1 70.9 70.9 70.9 70.9 70.9	0.99
MEDVOL=529	ADJ FLOW	1.02	1.02	-0-0-	45	1.1
GROUP=EtoH	VRE- SIST	39.0 35.2 42.6 45.0 54.2	56.0 56.0 50.3 50.3	56.6 62.6 61.6 61.5 62.9 =3 mg HD	VRE- SIST 70.4 71.7 71.7 71.7 70.6 69.3 69.3 69.3 69.3 69.3 69.3 69.3 69	74.1
	LACT	0.93 1.00 0.97 0.99	0.98 0.95 1.11 1.02 1.01		LACT DEXT DEXT DEXT DEXT DEXT DEXT DEXT DEX	1.11
DOSETIME=10:30	DEXT	0.731 0.724 0.716 0.752 0.750	0.851 0.844 0.884 0.882 0.922	.176 0.967 .161 0.979 .170 0.990 .166 0.980 .176 0.975	DEXT ROSV 0.778 0.778 0.864 0.840 0.830 0.812 0.814 0.814 0.812 0.823 0.722 0.773	ö
	LACT	0.396 0.412 0.390 0.380	0.297 0.284 0.287 0.258 0.224 0.192	0.176 0.161 0.170 0.176 0.176	LACT ATEV 0.051 0.125 0.125 0.245 0.265 0.282 0.301 0.302 0.297 0.298 0.291 0.307 0.318	0.503
FLAPWT=25.66 inued)	DEXT	1.150 1.130 1.110 1.150	1.150 1.140 1.130 1.140	05 1.140 03 1.140 04 1.150 06 1.120 08 1.130 FLAPWT=27.24	DEXT ROSA 1.120 1.130 1.140 1.140 1.110 1.110 1.110 1.120 1.130 1.110	1.100
PHASE=2 FLAPWT (continued)	LACT	0.006 0.005 0.008 0.006	0.002 0.002 0.003 0.005 0.003	00000	ATEA ATEA 0.003 0.005 0.005 0.005 0.007 0.001 0.011 0.012 0.012 0.012 0.012 0.012 0.007	0.012
	MEAN	1.00	0.00		FEAN 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0.99
IMAL/SIDE=96-56-5-L	MED	35.7 35.8 35.7 35.8 35.8	35 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	56 35.9 61 35.8 61 35.8 60 35.9 62 35.9	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	35.1
IAL/SIDI	BP MEAN	22 4 4 2 3 3 4 4 2 2 3 4 4 5 2 3 4 4 5 4 5 4 5 4 6 6 6 6 6 6 6 6 6 6 6 6	22 22 22 22 22 22 22 22 22 22 22 22 22	56 61 60 62 /SIDE=	MEAN 97 77 77 77 77 77 77 77 77 77 77 77 78 88 8	ĸ
Ā	ART Medph	4444	444444	7.4 7.4 7.4 7.4 ANIMAL	MED PH P P P P P P P P P P P P P P P P P P	7.4
DATE=02/14/96	HUMI	29.9 29.9 29.8 29.6 29.6	29.7 29.8 29.5 30.0 27.6	29.4 29.1 29.3 29.3 28.8 715/96	HUMI DITY 32.0 34.0 34.7	34.3
DATE=(	AIR	37.7 37.7 37.8 37.8 37.9	37.8 38.0 37.9 37.9 37.9	37.9 29.4 37.9 29.1 37.8 29.1 38.0 29.3 38.0 28.8	AIR 1EMP 35.5 35.1 35.1 35.1 35.1 35.1 35.1 35.1	35.4
FLAPN0=2630	REL- TIME	0.50 1.00 2.00 2.50	3.00 3.50 4.50 5.50		TIME -1.00 -0.75 -0.25 -	7.50
FLAP	ACTL TIME	11:00 11:30 12:00 13:00	13:30 14:00 15:00 15:30 16:00	16:30 17:00 18:00 18:30 FLAPNC	11ME 9:00 9:10 9:10 11:00 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30	17:30
	TARG	11:00 11:30 12:00 12:30	13:30 14:00 14:30 15:00 15:30	16:30 17:00 17:30 18:30	7ARG 11.86 9:30 9:35 9:45 10:30 11:30 11:30 12:30 14:30 15:30 15:30 16:30 17:30	17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

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	OLUC CUM	92.9		OLUC CUM	0.01	0.81	3.5	2.16	3.04	3.40 3.69	3.93	4.13 4.37	4.56	4.75	4.94 7.	5.32	5.53	2		SLUC	0.01 0.16 0.36 0.58 0.77 1.24
NCSU=Yes -	GLUC	0.94	NCSU=Yes	GLUC UTIL	0.90	3.1	1.1	6.0 8.0	0.79	0.73	0.46	0.42	0.39	0.37	0.39	0.38	0.42	; •	NCSU=Yes -	GLUC UT 1L	0.80 0.62 0.77 0.87 0.92 0.92
	ADJ RESIS	62.3	MEDVOL=511	ADJ RESIS	33.9	31.3	32.7	37.3 30.8	47.0	50.3 50.8	49.5	49.2 8 05	50.3	56.6	55.9 58.9	57.0	73.9	<b>†</b>		ADJ RESIS	34.5 36.0 35.1 35.2 33.3 34.7
MEDVOL=583	ADJ FLOW	1.12		ADJ FLOW	0.97	0.99	98.0	96.0	1.00	0.99	0.99	0.97	0.97	0.99	980	0.96	0.97	9.	MEDVOL=565	ADJ FLOW	1.07 1.08 1.08 1.08 1.09
GROUP=3 mg HD	VRE- SIST	70.0	GROUP=3 mg HD	VRE- SIST	33.3	30.8	31.2 32.2	36.7	46.3	49.5 50.0	48.8	50.5	49.5	55.7	55.0	56.1	72.7	0.36	GROUP=EtOH	VRE- SIST	37.6 39.2 38.2 39.4 38.2 36.3
	LACT	0.92		LACT	0.64	0.9	0.92	0.98	0.93	0.8 0.83	0.94	0.0	0.91	1.01	0.0	0.92	0.95	9		LACT	0.57 0.79 0.89 0.91 1.03
DOSETIME=10:00	DEXT ROSV	0.693	DOSETIME=10:14	DEXT ROSV	0.795	0.728	0.742	0.777	0.871	0.902	0.986	1.010	1.010	1.020	1.010	1.000	000	.,	DOSETIME=9:59	DEXT ROSV	0.819 0.889 0.834 0.790 0.788 0.782
DOSETIN	LACT	0.402		LACT	0.288	0.391	0.402	0.358	0.266	0.227	0.159	0.153	0.131	0.136	0.136	0.136	0.148	•		LACT	0.196 0.210 0.283 0.338 0.355 0.365
PHASE=2 FLAPWT=27.24 (continued)	DEXT ROSA	1.120	FLAPWT=21.39	DEXT	1.120	1.140	1.150	1.140	1.150	1.160	1.150	1.160	1.150	1.150	1.150	1.140	1.150	<u>:</u>	FLAPWT=25.14	DEXT ROSA	1.160 1.150 1.160 1.160 1.160
:2 FLAPWT=2 (continued)	LACT ATEA	0.011		LACT ATEA	0.005	0.007	0.004	0.003	0.006	0.004	0.005	0.005	0.004	0.005	0.008	0.007	0.005	0.0	PHASE=2 F	LACT	0.002 0.004 0.004 0.004 0.004
	MEAN	1.00	R PHASE=2	MEAN	0.99	5.5	38	0.98	1.02	. 6.	1.01	6.0	0.99	1.0	9:5	0.98	0.99			MEAN	0.99 1.00 1.00 1.00 1.01
IDE=96-56-4-L	MED	34.9	ANIMAL/SIDE=96-66-11-R	MED	34.6	33.1	33.0	35.1	35.1	35.1	35.1	35.1 35.1	35.1	35.1	55.1 7.1	35.1	34.8	2.	/SIDE=96-66-11-L	MED	33.9 34.6 34.8 34.9 34.9
/SIDE=9	BP MEAN	2	/SIDE=9	BP	32 33	3 25	32	36	£ 5	2 2	64	84 C	\$ \$	26	χ <sub>α</sub>	K 12	2 2	5		BP	33 33 33 33 33 33 33 33 33 33 33 33 33
ANIMAL/S	ART MEDPH	7.4	ANIMAL	ART MEDPH	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.7	7.4	7.4	7.7	7.7	7.5	?	SANIMAL	ART Medph	4444444
	HUMI DITY	33.6	21/96	HUMI DITY	36.4	35.4	35.2 35.3	35.3	35.2	34.8	34.8	34.5 7.5	33.9	33.9	33.9	33.8	33.9	÷.	DATE=02/21/96	HUMI DITY	38.1 37.9 38.1 38.1 37.8 37.8
DATE=02/15/96	AIR TEMP	35.4	DATE=02/21/96	AIR TEMP	36.3	36.8	36.9 36.9	37.0	36.9	36.9 36.9	36.9	36.8 36.8	36.8	36.9	36.9 36.9	36.9	36.9		DATE=0	AIR TEMP	35.4 36.5 36.7 36.9 37.1 37.1
	REL- TIME	8.00		REL- TIME	-0.98	-0.23	0.52	1.02	2.02	3.02	3.52	4.05 7.75	5.02	5.52	6.02	7.02	7.52	9.05	FLAPN0=2634	REL- TIME	-0.73 -0.73 -0.48 -0.23 -0.00 0.00
· FLAPNO=2632	ACTL TIME	18:00	- FLAPNO=2633	ACTL TIME	9:15	10:00	10:14 10:45	11:15	12:15	12:45	13:45	14:15	15:15	15:45	16:15	17:15	17:45	<u></u>	FLAF	ACTL TIME	9:00 9:15 9:30 9:45 9:59 10:30
1 6 8 8 1 1 3	TARG	18:00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	9:15	10:00	10:15 10:45	11:15	12:15	12:45	13:45	14:15	15:15	15:45	16:15	17:15	17:45	C : 01	1	TARG	9:00 9:15 9:35 9:45 10:00 11:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

ļ			i 1 1	
	SUC CUM CLUC	2.64 2.66 3.17 3.17 4.28 3.52 5.73 5.73 6.04 6.04	OLUG	0.00 0.23 0.23 0.53 1.18 1.60 1.60 1.60 1.60 1.60 1.60 1.60 1.60
NCSU=Yes -	GLUC UTIL	0.98 0.99 0.90 0.76 0.54 0.61 0.48 0.49	NCSD=Tes - GLUC UTIL	1.31 0.78 0.77 0.77 0.84 0.84 0.61 0.54 0.58 0.58 0.58 0.58 0.58
	ADJ RESIS		"	26.8 27.1 27.1 27.1 26.0 26.0 26.0 47.2 47.2 47.2 47.2 56.9 56.9 56.9 97.5 97.5
MEDV0L=565	ADJ FLOW	1.08 1.09 1.07 1.10 1.08 1.08 1.08 1.08	MEDVUL=364 ADJ ADJ FLOW RESIS	2011.08 8011.08 1.09 1.09 1.09 1.09 1.09
GROUP=E tOH	VRE- SIST	30.3 43.0 46.8 52.8 52.8 52.0 62.1 66.9 67.7 73.4 67.7	GKOUPECTUM ST VRE- KT SIST	29.1 29.1 29.1 28.1 28.1 30.5 20.1 20.0 20.0 20.0 20.0 20.0 20.0 20.0
	LACT			0.25 0.59 0.59 0.90 0.91 0.93 0.93 0.93 0.93 0.93 0.93
DOSETIME=9:59	DEXT	0.735 0.756 0.756 0.811 0.835 0.927 0.928 0.958 0.958 0.958	DOSELLME= 10: 15 ICT DEXT LA EV ROSV DE	0.620 0.812 0.816 0.806 0.796 0.785 0.785 0.752 0.904 0.904 0.905 0.923 0.923 0.923 0.923 0.923
	LACT	W W W W W W W W W W W W W W W W W W W	٠, ٣	0.134 0.194 0.249 0.287 0.363 0.363 0.256 0.236 0.236 0.236 0.236 0.236 0.236 0.237 0.236 0.237 0.237 0.237 0.237 0.237
FLAPWT=25.14 nued)	DEXT	1.150 1.150 1.150 1.150 1.150 1.150 1.150	FLAPWI=24.24 DEXT L	1.150 1.130 1.140 1.130 1.140 1.140 1.140 1.130 1.130
PHASE=2 FLAPW (continued)	LACT	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	PHASE=Z FL AN LACT DW ATEA	0.002 0.005 0.006 0.008 0.007 0.009 0.009 0.009 0.010
	MEAN FLOW	9.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00	MEAN FLOW	0.0000000000000000000000000000000000000
SIDE=96-66-11-L	MED TEMP	25.25.25.25.25.25.25.25.25.25.25.25.25.2	SIDE=90-07-3-K P MED ME. AN TEMP FL	W W W W W W W W W W W W W W W W W W W
	BP MEAN	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	_ аш	888888888888885555 88888888888888555
ANIMAL/	ART MEDPH		ANIMAL ART MEDPH M	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
DATE=02/21/96	HUMI DITY	38.28 38.20	DAIE=UZ/ZZ/YO AIR HUMI TEMP DITY	88888888888888888888888888888888888888
DATE=0	AIR	37.3 37.0 37.0 37.0 37.0 37.0 37.0 37.0	DAIE=U AIR TEMP	35.7.7.3 35.7.7.3 36.1.1.1.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.4.3 36.4.4.3 36.4.4.3 36.4.4.3 36.4.
FLAPNO=2634	REL- TIME	30 1.52 30 2.50 30 2.52 30 3.02 30 4.52 30 6.52 30 6.52 30 7.52 30 7.52 30 8.02	NU=2033 REL- TIME	-1.00 -0.25
FLAP	ACTL TIME	11:30 12:30 13:30 13:30 14:00 15:30 17:00 17:30 18:00	ACTL TIME	9:15 9:30 9:30 10:10 10:15 11:15 12:45 13:15 14:45 15:45 16:15 16:15 17:15 18:45
	TARG	11:30 12:30 13:00 14:30 15:30 16:30 17:00 17:00 18:00	TARG	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:	CUM	0.01 0.20 0.35 0.63 1.28 1.28 2.29 2.29	2.22 3.23 3.23 3.23 4.4 4.4 4.4 5.7 5.7 6.7 7.7 7.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8	GLUC 6LUC 0.01 0.39 0.60 0.80 1.25 1.25 2.48 2.48 2.48 2.48 3.36 4.15
NCSU=Yes	GLUC UTIL	0.99 0.78 0.50 0.66 0.65 0.65 0.68	0.69 0.62 0.63 0.59 0.61 0.67 0.71 0.53	0.11 1.10 0.73 0.83 0.83 0.85 0.85 0.75 0.75 0.51 0.51 0.51
MEDVOL=526	ADJ RESIS	48.1 49.1 51.8 46.6 42.7 38.9 31.1 43.9 44.3	.01 48.6 .01 52.3 .03 56.1 .00 62.8 .00 67.8 .01 72.4 .01 71.0 .01 57.2	RESIS 34.7 30.8 31.3 31.3 34.3 34.3 34.3 34.3 45.5 45.5 53.1 55.7
MEDVO	ADJ FLOW	1.00 1.02 1.02 1.03 1.00 1.00 1.00		ADJ PLOW 0.92 0.93 0.93 0.93 0.93 0.93 0.93
=3 mg HD	VRE- SIST	48.7 47.2 52.5 47.2 47.4 47.5 47.9	49.2 53.0 56.9 62.9 63.7 63.7 73.7 73.4 72.0 58.0	VRE- SIST 32.5 28.9 29.0 29.0 33.7 33.7 33.2 42.6 42.6 43.9 47.6 43.9 51.3
GROUP=3	LACT	0.34 0.50 0.73 0.92 0.92 1.04 1.04		LACT DEXT 0.29 0.67 0.99 0.97 1.03 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
DOSETIME=9:59	DEXT	0.723 0.833 0.897 0.910 0.860 0.877 0.851 0.854 0.861	265 0.845 256 0.876 254 0.884 263 0.894 265 0.851 267 0.881 266 0.841 276 0.817 222 0.851	DEXT ROSV 0.628 0.798 0.773 0.773 0.754 0.757 0.800 0.811 0.914 0.916 0.933 0.957
	LACT	0.137 0.157 0.172 0.189 0.235 0.245 0.278 0.278	0.265 0.256 0.254 0.263 0.267 0.267 0.267 0.276	LACT ATEV 0.153 0.232 0.393 0.393 0.393 0.393 0.393 0.393 0.254 0.254 0.215 0.215 0.215
FLAPWT=23.79	DEXT	1.120 1.130 1.130 1.130 1.130 1.130	7.	DEXT ROSA 1.140 1.140 1.150 1.150 1.150 1.150 1.150 1.150 1.150 1.150 1.150 1.140
	LACT	0.002 0.004 0.005 0.005 0.005 0.008 0.008	00 0.009 00 0.010 00 0.010 00 0.011 00 0.011 00 0.013 00 0.018 00 0.021	LACT ATEA 0.002 0.005 0.003 0.004 0.004 0.004 0.004 0.007 0.007 0.007 0.008 0.008
L PHASE=2	MEAN	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0		FLOW 1.03 1.04 1.06 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MAL/SIDE=96-67-5-	MED	84444444444 66744666666666	49 35.0 53 35.1 58 35.1 64 35.1 68 35.1 73 35.1 72 35.2 58 35.3 81DE=96-69-11	MED 34.55 S. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
L/SIDE=	BP	7444 7444 7444 7444 7444 7444 7444 744	4.9 5.3 6.6 6.6 6.6 6.6 6.7 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7	MEAN 32 33 33 33 44 42 45 45 45 45 45 45 45 45 45 45 45 45 45
ANIMA	ART MEDPH	44444444444	7.4 7.4 7.4 7.5 7.5 7.4 7.4	ART MEDPH 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
122/96	HUMI	35.3 34.0 32.8 32.1 31.4 31.5 32.9 32.9	36.7 35.1 36.8 33.2 36.8 32.6 36.7 32.4 36.8 32.3 36.8 32.3 36.9 31.7 37.0 31.5	HUMI 91174 33.9 33.18 33.18 33.18 32.2 32.5 32.5 32.5 32.5 32.5 32.5 32.5
DATE=02/22/96	AIR TEMP	35.3 35.3 36.7 36.7 36.7 36.6 36.8 36.8	36.7 36.8 36.8 36.8 36.8 36.8 36.8 36.9 37.0	AIR 35.9 35.9 36.1 36.2 36.3 36.3 36.3 36.7 36.7 36.7 36.7 36.7
FLAPN0=2636	REL- TIME	-0.98 -0.73 -0.23 -0.23 -0.00 -0.00 -0.23 -0.23 -0.23 -0.23 -0.52 -0.23 -0.52	30 3.52 30 4.02 30 4.52 30 5.52 30 6.02 30 7.02 30 7.52 30 8.02 FLAPNO=2637	REL- 11ME -0.97 -0.72 -0.47 -0.22 0.00 0.00 0.53 1.53 2.03 2.03 2.53 3.03 4.03 4.03 5.03 5.03
- FLAPN	ACTL TIME	9:00 9:15 9:45 9:59 10:30 11:30 12:30	13:30 14:00 15:00 15:00 16:00 17:00 17:30 18:00	ACTL 11ME 9:00 9:15 9:15 9:15 9:15 11:30 11:30 11:30 11:30 11:30 11:30 11:30
	TARG	9:00 9:15 9:15 9:45 10:00 11:00 11:30 12:30 13:30	13:30 14:00 14:30 15:30 15:30 16:00 17:30 17:30	1ARG 11ME 9:00 9:15 9:45 10:00 10:30 11:30 11:30 12:00 13:00 14:00 15:00 15:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			:			;		
	CUM CUM	4.31 4.46 4.60 4.75 4.89		CUM	0.01 0.13 0.13 0.13 1.23 2.20 2.20 2.30 4.43 4.64	5.15 5.35 5.77 6.00	SULU NUO	0.01 0.22 0.40
NCSU≕Yes -	GLUC UTIL	0.31 0.39 0.29 0.28	NCSU=Yes -	GLUC	7.23 0.65 0.98 0.98 0.98 0.65 0.65 0.65 0.65	0.45 0.40 0.41 0.44 0.46	GLUC UTIL	0.68
MEDVOL=486 N	ADJ RESIS	60.4 55.3 53.1 52.6 50.7	MEDVOL=510	ADJ RESIS	21.6 25.6 25.6 25.6 26.6 23.6 23.6 23.6 23.6 23.6 23.6 23	97 42.1 98 50.1 98 44.8 98 42.7 99 42.3 MEDVOL=521	ADJ RESIS	31.7 28.3 45.3
MEDVO	ADJ FLOW	0.93 0.94 0.93 0.93	MEDVO	ADJ FLOW	0.59 0.99 0.99 0.99 0.99 0.99		ADJ FLOW	1.01
GROUP=3 mg HD	VRE- SIST	56.6 51.7 49.2 47.5	GROUP=3 mg HD	VRE- SIST	20.55 20.55	01 41.4 05 49.2 08 44.0 96 42.0 94 41.6 GROUP=3 mg HD	VRE- SIST	31.8 28.4 45.5
GROUP	LACT	1.27 1.20 1.23 1.06	GROUP	LACT	0.18 0.09 0.09 0.09 0.09 0.09 0.09 0.09 0.0	' ' ' ' ' ' ' ' '	LACT	0.52 0.59 0.79
DOSETIME=9:58	DEXT ROSV	0.986 1.000 1.010 0.995 1.010	DOSETIME=9:43	DEXT	0.547 0.805 0.815 0.751 0.760 0.670 0.660 0.748 0.840 0.874	233 0.909 1 211 0.947 1 207 0.930 0 213 0.927 0 212 0.910 0	DEXT	0.628 0.714 0.761
	LACT	0.191 0.177 0.169 0.152 0.142		LACT ATEV	0.112 0.225 0.300 0.438 0.467 0.474 0.314 0.382 0.256		LACT ATEV	0.178 0.239 0.288
FLAPWT=27.5 tinued)	DEXT	1.130 1.140 1.130 1.130	FLAPWT=29.16	DEXT	7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	9 1.130 8 1.140 1 1.130 9 1.140 6 1.130 FLAPWT=29.31	DEXT	0.960 1.110 1.120
PHASE=2 FLAPWT (continued)	LACT	0.008 0.009 0.009 0.009		LACT	0.005 0.003 0.003 0.005 0.005 0.007 0.007	00400	LACT ATEA	0.004
	MEAN	0.99 1.01 1.00 0.99	-L PHASE=2	MEAN	2	0.99 0.00 1.00 0.0 1.00 0.0 1.01 0.0 -R PHASE=2	MEAN	1.01
SIDE=96-69-11-R	MED	35.1 35.1 35.1 35.1	ANIMAL/SIDE=96-69-11-L	MED	4,7%%%%%%%%%%%%%%%% 4,7%%%%%%%%%%%%%%%%%	7.4 41 35.2 7.4 49 35.1 7.4 44 35.3 7.4 42 35.3 7.4 42 35.3 ANIMAL/SIDE=96-69-10-R	MED	34.1 34.3 34.3
/SIDE=	BP MEAN	55 50 44 47	SIDE=9	BP MEAN	\$\$\$\$\$ <b>\$</b> \$	41 49 44 42 42 42 7SIDE=5	BP MEAN	35 54 42 42
ANIMAL/	ART Medph	7.4 7.4 7.4 7.5	ANIMAL/	ART Medph	,,,,,,,,,,,,,,,,,,	7.4 7.4 7.4 7.4 7.4	ART MEDPH	7.4 7.4 7.4
96/90/	HUMI	32.3 32.8 32.4 32.2	96/90	HUMI	88888888888888888888888888888888888888	32.5 32.7 32.2 32.4 32.0	HUMI	32.8 33.6 33.1
DATE=03/06/96	AIR TEMP	36.7 36.7 36.8 36.8	DATE=03/06/96	AIR TEMP	3865 3875 3875 3875 3875 3875 3875 3875 387	37.1 32.5 36.9 32.7 37.2 32.2 37.2 32.4 37.2 32.0 DATE=03/07/96	AIR	35.9 36.0 36.1
FLAPNO=2637	REL- TIME	6.03 6.53 7.03 7.53 8.03		REL- Time	-0.22 -0.47 -0.53		REL- TIME	-0.98 -0.73 -0.48
- FLAPŇ	ACTL TIME	16:00 16:30 17:00 17:30	FLAPN0=2638	ACTL TIME	8:45 9:00 9:00 9:43 9:43 10:45 11:45 14:45 14:45 15:15 14:45 15:15	15:45 6.01 16:15 6.55 16:45 7.03 17:45 7.55 17:45 8.00 FLAPNO=2639	ACTL TIME	9:15 9:30 9:45
	TARG	16:00 16:30 17:00 17:30 18:00		TARG	88.5 9.10 9.15 10.15 11.15 12.15 13.15 13.15 14.15 14.15	15:45 16:15 16:45 17:15	TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	OLUC GLUC	0.56	0.74	1.19	1.66	2.15	2.62	2.99	3.32	3.59	3.85	4.10	4.35	4.58	4.83	5.05	5.26	5.47	5.69	
NCSU=Yes	GLUC UTIL	99.0	0.73	0.88	0.92	0.98	0.94	0.75	99.0	0.53	0.52	0.52	0.50	0.45	0.49	0.45	0.42	0.41	75.0	
MEDVOL=521	ADJ RESIS	31.9	30.1	27.0	25.9	26.8	32.9	36.8	7.07	50.8	42.6	46.6	9.67	51.8	53.9	54.5	53.3	54.3	54.3	
HD MED!	ADJ FLOW	1.03	1.03	9.	9.0	1.01	1.00	0.98	1.0	1.00	1.01	1.01	1.01	9.	0.98	0.98	1.01	0.99	0.99	
GROUP=3 mg H	VRE- SIST	32.0	30.2	27.1	26.0	56.9	33.0	36.9	40.6	51.0	45.8	46.8	49.8	52.0	54.1	24.4	53.5	54.5	54.5	
	LACT	0.88	0.0	0.89	0.93	0.0	0.93	0.94	96.0	0.88	0.0	0.0	0.94	0.97	98.0	0.93	1.04	1.06	0.94	
DOSETIME=10:14	DEXT ROSV	0.797	0.751	0.688	699.0	0.654	0.669	0.742	0.803	0.863	0.867	0.878	0.887	0.888	0.886	0.883	0.917	0.907	0.892	
DOSETI	LACT	0.283	0.330	0.394	0.431	0.441	0.439	0.372	0.315	0.239	0.243	0.242	0.242	0.230	0.226	0.227	0.225	0.231	0.224	
FLAPWT=29.31 itinued)	DEXT ROSA	1.110	1.110	1.120	1.120	1.130	1.130	1.120	1.120	1.120	1.120	1.130	1.130	1.110	1.130	1.110	1.120	1.110	1.110	
5	LACT	900.0	900.0	0.009	0.011	0.014	0.011	0.015	0.012	0.014	0.015	0.015	0.014	0.015	0.015	0.015	0.014	0.015	0.019	
R PHASE=2	MEAN	1.03	1.03	9.	1.00	1.01	1.00	0.98	1.01	9.	1.01	1.01	1.01	9.	0.98	0.98	1.01	0.99	0.99	
ANIMAL/SIDE=96-69-10-R	MED TEMP	34.4	34.3	34.4	34.4	34.4	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.6	34.6	34.6	
/SIDE=90	BP MEAN	33	31	22	%	22	33	36	41	51	94	25	S	25	53	23	24	24	24	
ANIMAL,	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	
96/20.	HUMI DITY	32.1	32.5	32.2	31.8	31.6	32.5	32.1	31.9	31.4	31.9	32.0	32.0	31.9	30.6	31.5	31.5	30.7	30.8	
DATE=03/07/96	AIR	36.2	36.1	36.3	36.3	36.3	36.3	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.5	36.4	36.4	
	REL- TIME	-0.23	0.00	0.52	1.02	1.52	2.03	2.52	3.05	3.52	4.02	4.52	2.05	5.55	6.02	6.52	7.02	7.52	8.02	
FLAPN0=2639	ACTL TIME	10:00	10:14	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	
	TARG	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	

NCSU=Yes 0.92 0.81 0.86 0.97 11.04 11.05 11.07 0.81 0.53 0.33 0.33 MEDVOL=485 31.8 29.3 26.1 26.1 26.2 33.2 33.2 33.3 34.3 47.3 47.3 50.3 50.5 50.5 ADJ RESIS ADJ FLOW 0.92 0.92 0.93 0.93 0.93 0.93 0.93 0.93 全 GROUP=3 mg 0.43 0.67 0.87 0.93 0.95 0.95 0.95 0.95 0.95 1.01 1.15 LACT DEXT DOSET IME=10:00 0.619 0.668 0.643 0.572 0.572 0.573 0.683 0.683 0.677 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.776 0.777 0.776 0.776 0.777 0.776 0.776 0.776 0.777 0.776 0.777 0.776 0.777 0.776 0.777 0.776 0.777 0.776 0.777 0.776 0.777 0.776 0.777 DEXT ROSV 0.223 0.315 0.472 0.472 0.574 0.587 0.454 0.452 0.452 0.228 0.228 0.226 LACT ANIMAL/SIDE=96-69-10-L PHASE=2 FLAPWT=33.61 1.130 1.130 1.130 1.130 1.140 1.140 1.120 1.120 1.120 1.120 1.120 1.120 1.120 DEXT 0.003 0.007 0.008 0.008 0.008 0.010 0.011 0.014 0.015 0.015 1.000 0 MEAN BP MEAN ART Medph 44444444444444444 DATE=03/07/96 AIR TEMP 35.7 36.1 36.1 36.3 36.5 36.8 36.8 36.8 36.9 36.9 37.0 37.0 37.0 -1.00 -0.00 REL-TIME FLAPN0=2640 ACTL TIME 

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	ΣU	- 7.0
	ᇙ끏	5.31
NCSU=Yes	GLUC	0.29
/OL=485	ADJ RESIS	45.8
ÆÐ	ADJ FLOW	0.93
GROUP=3 mg HD MEDVOL=485	VRE- SIST	39.0 42.8 42.8
GROU	LACT	1.17
IME=10:00		0.949
DOSET	LACT	0.205
PHASE=2 FLAPWT=33.61 DOSETIME=10:00 (continued)	DEXT	1.110
=2 FLA (contir	LACT	0.016 0.017 0.018
	MEAN	1.00
ANIMAL/SIDE=96-69-10-L	MED	35.4 35.4 35.4
SIDE=9	BP MEAN	65 73 73 73
ANIMAL/	ART Medph	4. Z 4. Z 4. Z
96/20	HUMI	31.9 32.0 31.7
ATE=03/	AIR	37.0 37.0 37.0
2640 D	REL. TIME	7.00 7.50 8.00
FLAPNO=	ACTL TIME	17:00 17:30 18:00
FLAPNO=2640 DATE=03/07/96	TARG	17:00 17:30 18:00